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MONTANA FARM REVIEW

Volume III (1924)

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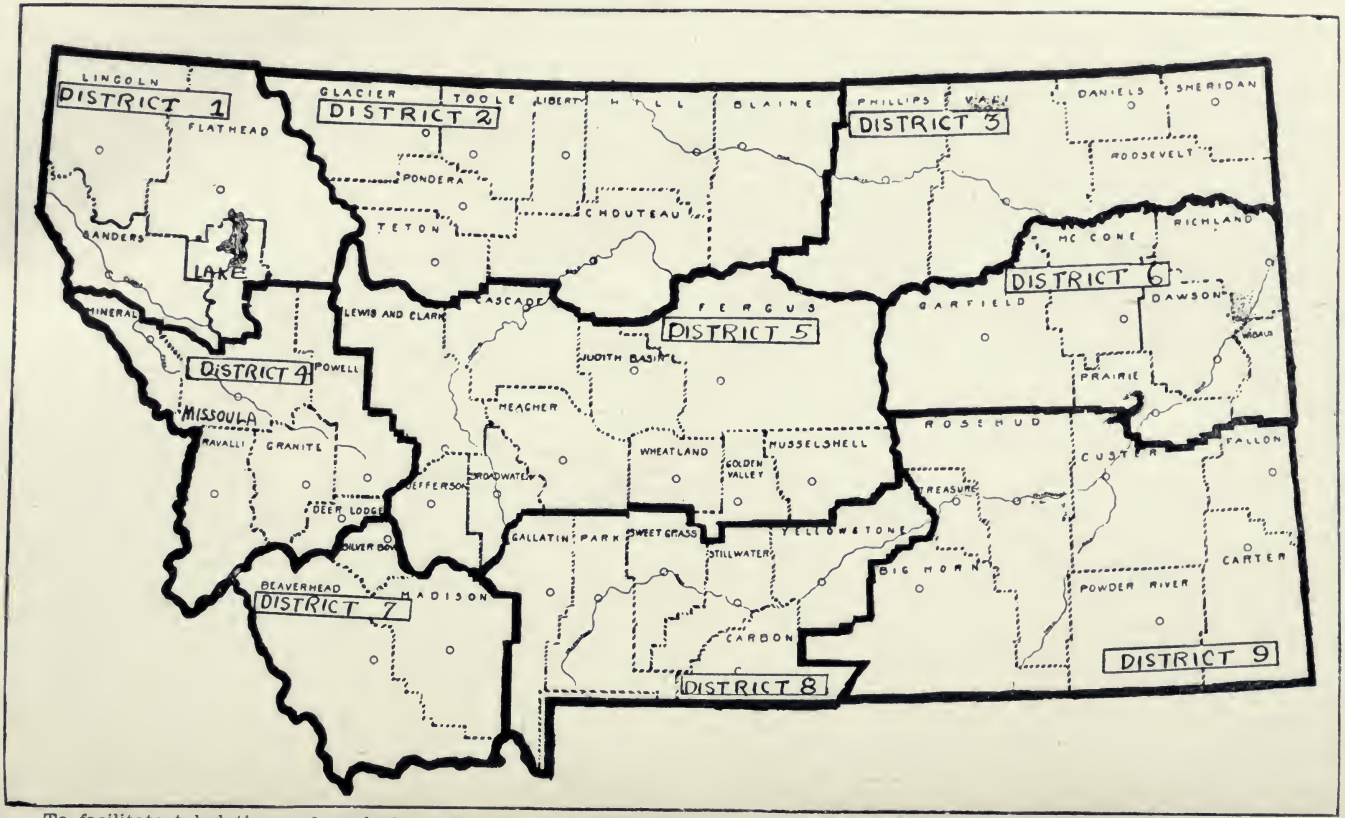

To facilitate tabulation and analysis of data in crop reporting work, counties with generally similar farming conditions are grouped into districts as shown above. In most county tables herein, grouping has been on this plan, instead of alphabetically.

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MONTANA FARM REVIEW

FOR 1924

VOLUME III

Issued by

THE MONTANA COOPERATIVE CROP REPORTING SERVICE

J. G. DIAMOND, Agricultural Statistician.
HELENA, MONTANA.

UNITED STATES DEPARTMENT OF AGRICULTURE
BUREAU OF AGRICULTURAL ECONOMICS
Washington, D.C.

H. C. TAYLOR, Chief of Bureau

and

MONTANA STATE DEPARTMENT OF AGRICULTURE
Helena, Montana

CHESTER C. DAVIS, Commissioner

Cooperating

JOINT BULLETIN

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INDEPENDENT PUBLISHING CO.
HELENA, MONTANA

FOREWORD

Volume 3 of the Montana Farm Review is a current review of the 1924 season of agriculture in Montana with such comparative data as will afford as nearly as possible a complete picture of agriculture in the state as it finds itself at the close of 1924.

Statistics of production and farm value of crops and livestock contained herein are compiled by the Montana Cooperative Crop Reporting Service, which is a unit of the Division of Crop and Livestock Estimates, of the U. S. Bureau of Agricultural Economics, cooperating with the Montana State Department of Agriculture and with the Extension Service of the Montana State College.

The estimates of crop acreage and production are those of the division of the United States Department of Agriculture, crops for 1924 and livestock for January 1, 1925, being subject to revision, and those for preceding years being revisions for those years.

County figures are those prepared under direction of the federal statistician both from information collected through more than three thousand voluntary reporters to the federal service and from information compiled from the annual state farm census.

The tables showing relative farm income from crops and livestock in 1924, are compiled by the Montana State Department of Agriculture, based on the federal estimates of production and farm value, and must be interpreted in a relative sense, to show the approximate difference between these returns in both years, rather than to be actual measure of the returns in either year, which is not the point sought.

CHESTER C. DAVIS,
Commissioner of Agriculture.

JAY G. DIAMOND,
Agricultural Statistician.

Farm Income 1924 and 1923.

Prominent among all the other facts concerning Montana's agriculture in the 1924 crop season is the fact that total cash returns from sales of crops, livestock and other products greatly exceeded the aggregate of a year ago and were likewise better than any year since the war period. After four years of struggle to adjust stubbornly high production costs to stubbornly low market prices for his principal cash crops, the Montana farmer has suddenly found an unexpected ally in the old law of supply and demand which has lifted the price of wheat, his principal surplus crop to a point where cash returns have left a margin available for cleaning up old indebtedness and to some extent for financing new purchases.

Cash returns to agriculture are difficult to determine with any great exactness yet estimates can be arrived at, by computing, at average farm prices, from statistics of production of crops and marketings of livestock, the approximate quantities of both sold. Estimates of this nature having been made by the Montana State Department, for Montana's crops, livestock and livestock products on the same basis for the years 1923 and 1924, it is possible to arrive at a measure of the cash return in both years.

The value of crops sold from 1923 production and livestock and livestock products marketed in 1923 and similar valuations for 1924 were as follows:

Year.	Cash from Crops.	Cash from Livestock, Etc.	Total.
1923	$46,784,000	$50,872,000	$ 97,656,000
1924	74,367,000	53,814,000	128,181,000

Cash from crops it will be noted increased more than half of their 1923 total compared with a moderate increase for livestock and livestock products, and in 1924 reversed position with livestock as making up the larger share of the total of both.

Table I. FARM CASH INCOME 1923 AND 1924.
(From Crops and Livestock Items Sold.)

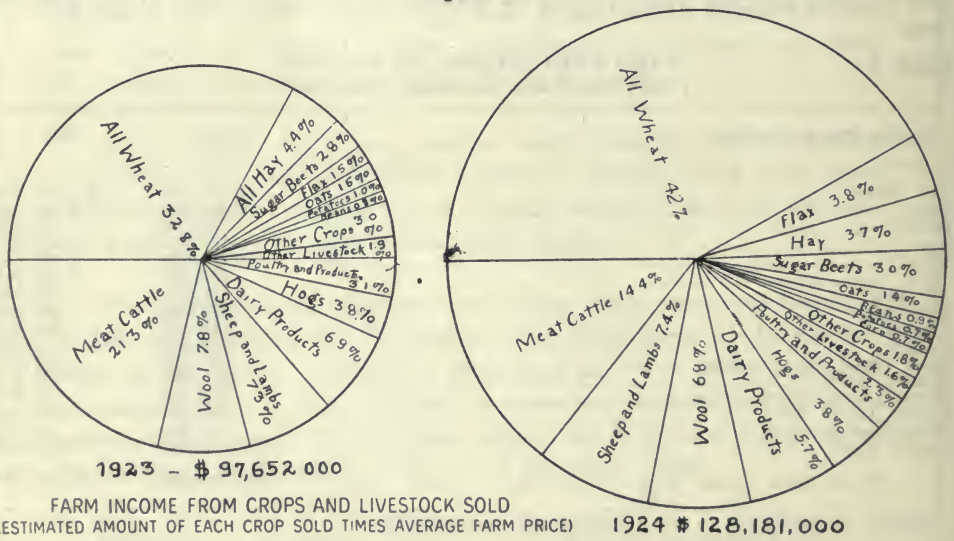
FROM CROPS SOLD:	1923.	1924.
All wheat	$33,008,000	$54,327,000
Oats	1,434,000	1,866,000
Barley	167,000	321,000
Rye	157,000	318,000
Flax	1,474,000	4,873,000
Corn	422,000	911,000
All Hay	3,911,000	4,176,000
Potatoes	998,000	992,000
Apples	445,000	200,000
Beans	880,000	1,110,000
Peas (Seed and Canning)	533,000	569,000
Alfalfa Seed	210,000	305,000
Miscellaneous Seed Crops	50,000	60,000
Truck Crops Sold	300,000	320,000
Miscellaneous Fruits	70,000	50,000
Sugar Beets	2,725,000	3,969,000
Total from Crops Sold	$46,784,000	$74,367,000
FROM LIVESTOCK AND LIVESTOCK PRODUCTS:		
Meat Cattle	$20,900,000	$18,504,000
Sheep and Lambs	7,115,000	9,484,000
Wool	7,643,000	8,692,000
Milk and Dairy Products	6,750,000	7,282,000
Hogs	3,600,000	4,850,000
All Poultry and Eggs	2,994,000	2,926,000
Horses (raised and sold)	1,700,000	1,900,000
Honey and Wax	170,000	176,000
Total from Livestock and Livestock Products	$50,872,000	$53,814,000
Combined Total from Crops and Livestock Sources	$97,656,000	$128,181,000

Table I shows the distribution of income from various sources included under the main headings of crops and livestock. Figure I shows comparative distribution of income from principal sources in both years. From these data it will be seen that in the case of crops the bulk of the increase comes in the greatly improved return from wheat, although all crops with the principal exceptions of potatoes and apples, also show increases. Among the less important crops, flax stands out as more than trebling its 1923 income, due both to a better price and a greatly increased production.

In the livestock group, meat cattle fell off in their contribution to the 1924 total, although this decline was more than offset by increased returns from sheep and lambs, wool, hogs, and milk and dairy products. Returns from all poultry and eggs were practically the same as last year. Income from horses marketed and value of colts raised also indicated an improvement over last year as a result of an increase in numbers marketed.

Considering the farmer, the cattleman and the sheepman as three important units of the state's agricultural industry, it will be noted that two of these units, the farmer and the sheepman, have enjoyed a relatively prosperous year, their present favorable position resulting largely from improvement in market prices of their commodities. On the other hand the cattleman is still struggling along with relatively low prices for beef compared with production costs, the same dilemma out of which the farmer and the sheepman have escaped, the former for the time being at least, and the latter somewhat more permanently. During the past year the general prospect of the beef grower has recorded a slight improvement and there is some consolation in the general belief that this improvement will continue.

Figure I.



FARM INCOME FROM CROPS AND LIVESTOCK SOLD
(ESTIMATED AMOUNT OF EACH CROP SOLD TIMES AVERAGE FARM PRICE)

Income 1924 Compared with 1923 by Districts and Counties.

Figure II shows a distribution of total crop and livestock income by crop districts of the state, with relative income from 1923 and 1924 crops and livestock, and percentage of change. The distribution of the increased income in 1924 was such as to give practically all districts in the state a better showing than in 1923, but the marked improvement came where it was most needed, throughout the wheat growing areas and particularly in the north-central, north-eastern and eastern districts. In

Figure II.

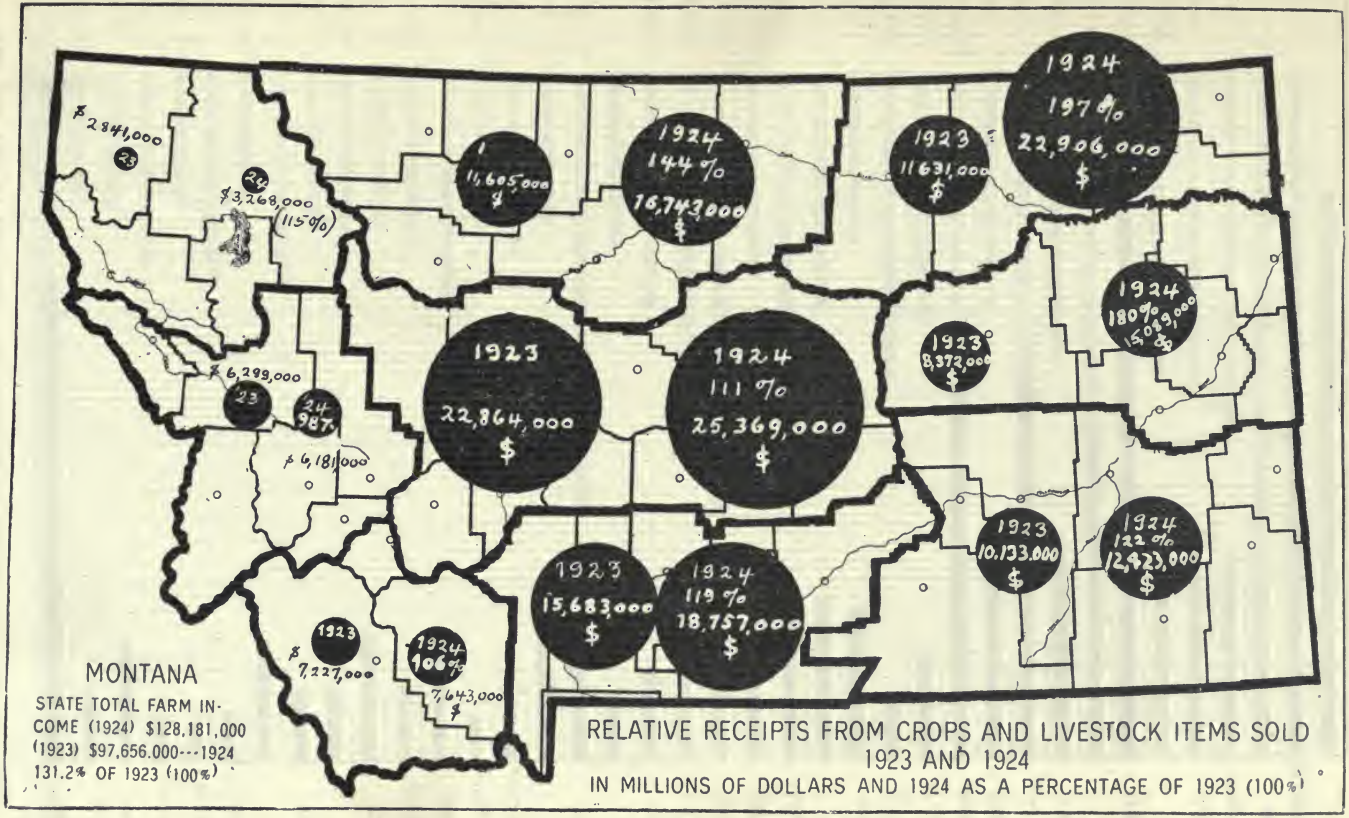
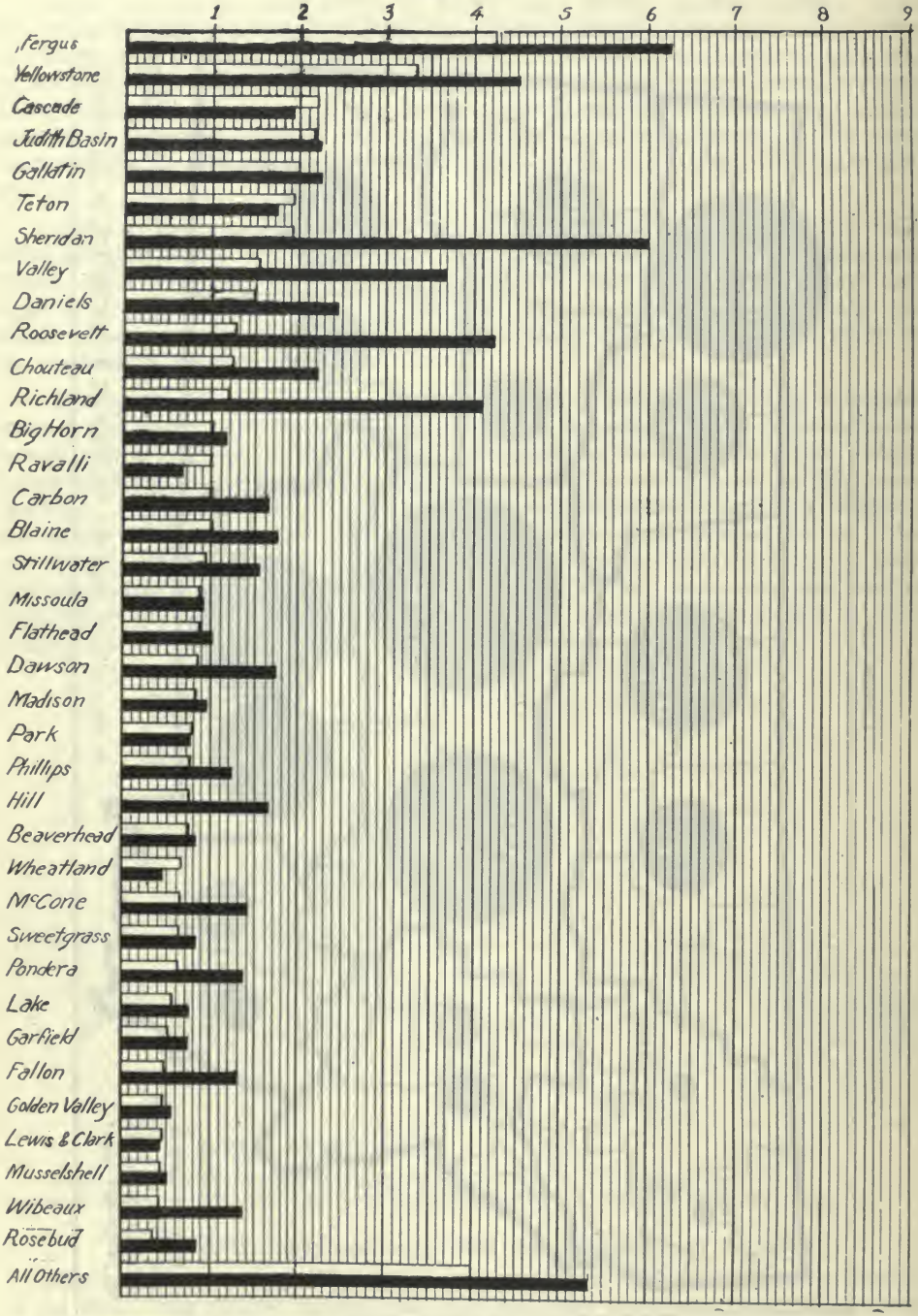

1924
197%
22,906,000
$
1923
11631,000
$
1924
144%
16,743,000
$
1923
11,605,000
$
$2841,000
23
24
$3,268,000
(115%)
1924
180%
15,019,000
$
1923
8,373,000
$
1923
22,864,000
$
1924
111%
25,369,000
$
$6,299,000
23
24
98%
$6,181,000
1923
10,133,000
$
1924
122%
12,423,000
$
1923
15,683,000
$
1924
119%
18,757,000
$
1923
$7,227,000
1924
106%
$7,643,000
MONTANA
STATE TOTAL FARM INCOME (1924) $128,181,000
(1923) $97,656.000---1924
131.2% OF 1923 (100%)
RELATIVE RECEIPTS FROM CROPS AND LIVESTOCK ITEMS SOLD
1923 AND 1924
IN MILLIONS OF DOLLARS AND 1924 AS A PERCENTAGE OF 1923 (100%)

Figure III.



Estimated cash farm income by counties from crops sold in 1923 and 1924. Counties are arranged according to 1923 rank.

(Year 1923 represented by white, 1924 by black bars.)

Figure IV.

Estimated combined cash farm income by counties from crops and livestock items sold in 1923 and 1924. Counties are arranged according to 1923 rank.

(Year 1923 represented by white, 1924 by black bars.)

the districts where livestock is important, southwestern, south-central and central districts a decline in returns from beef cattle was more than offset by increased income from crops and from sheep and wool in those districts.

A further analysis of income by counties is shown in table II following and in graphs of county income on pages 6 and 7. In the graphs 1923 values are shown by white bars and 1924 income by black bars. 1923 rank of counties is used in both graphs and it is interesting to note the changes in rank for 1924. Sheridan county, in total cash income in 1924, ranks next to Fergus, displacing Yellowstone to third place. Roosevelt, Richland, Valley and Blaine, come up next in order and displace Beaverhead, Cascade, Judith Basin and Gallatin. In general, most of the changes in rank resulted in sections of the state where wheat and flax crops are important.

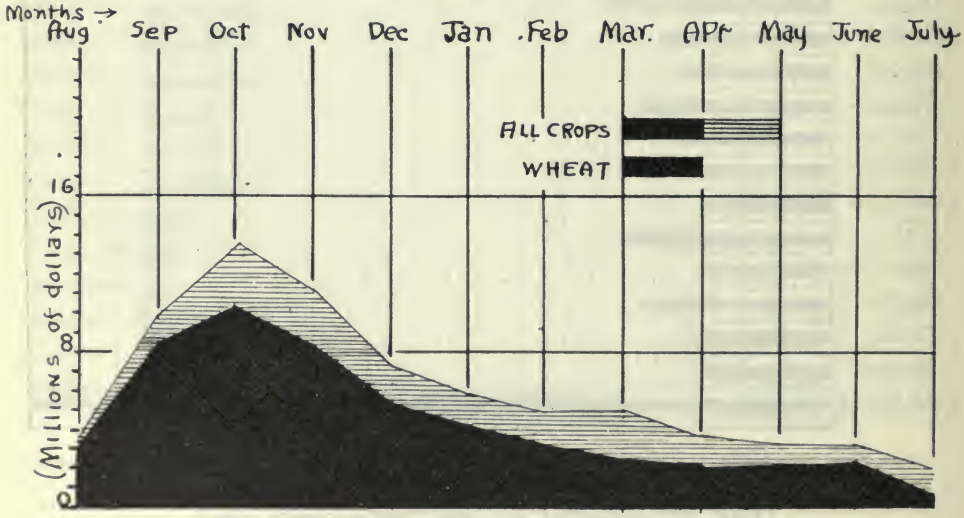
Monthly Distribution Farm Income.

The peak of marketings of farm crops comes in the fall months September to November, and usually in the month of October. Likewise cattle shipments reach their peak in this same period. Farm income, therefore, will follow this distribution, rising sharply with the early market movement in August, and reaching a peak some time in October or November, from which point it will fall off to a minimum in July, the end of the crop season.

A hypothetical monthly distribution of income from crops sold and to be sold from 1924 production is shown in figure V and is based on the assumption that monthly marketings of all crops have conformed to the average of eight principal crops in the past five years. The difference between this distribution and the actual would probably be that of a little sharper peak in October and a slightly lower close-of-season minimum, since shipment data available at this date, indicate that farmers have disposed of somewhat more of their grain crops than usual during the fall months. In the graph is indicated the large ratio of income from wheat to that from all crops.

Income from livestock and total crop and livestock income in a general way would follow this graph, since marketings of livestock follow closely the peaks and low points for crops.

Figure V.



Distribution of farm income from crops sold and to be sold from 1924 production.

Table II.

HYPOTHETICAL VALUE OF CROPS, LIVESTOCK AND LIVESTOCK PRODUCTS SOLD BY FARMERS BASED ON RELATIVE PERCENTAGE OF STATE TOTALS OF CROP AND LIVESTOCK INCOME IN EACH COUNTY FOR 1923 AND 1924.

DISTRICT AND COUNTY.	1923 Crops	1924 Crops	1923 Livestock	1924 Livestock	1923 Total	1924 Total
NORTHWESTERN—						
Flathead	876,100	1,033,000	351,500	388,750	1,227,600	1,421,750
Lincoln	98,600	82,900	134,500	127,500	233,100	210,400
Lake	584,300	747,900	289,500	352,750	873,800	1,100,650
Sanders	183,900	216,900	322,500	318,000	506,400	534,900
NORTH CENTRAL—						
Blaine	1,001,000	1,755,400	1,867,000	2,012,750	2,868,000	3,768,150
Chouteau	1,240,900	2,225,200	1,084,000	1,158,750	2,324,900	3,383,950
Glacier	298,800	379,200	584,600	604,500	883,400	983,700
Hill	766,000	1,649,000	670,000	746,750	1,436,000	2,395,750
Liberty	195,800	400,000	233,500	240,250	429,300	640,250
Pondera	654,600	1,387,600	655,500	758,500	1,310,100	2,146,100
Teton	1,942,000	1,742,400	882,500	886,500	2,824,500	2,628,900
Toole	101,500	310,300	428,000	486,000	529,500	796,300
NORTHEASTERN—						
Daniels	1,498,900	2,463,800	433,500	495,000	1,932,400	2,958,800
Phillips	791,300	1,231,300	1,267,000	1,398,000	2,058,300	2,629,300
Roosevelt	1,285,300	4,244,100	570,500	602,250	1,855,800	4,846,350
Sheridan	1,933,700	6,034,700	888,000	928,000	2,821,700	6,962,700
Valley	1,541,300	3,709,100	1,421,500	1,600,250	2,962,800	5,309,350
WEST CENTRAL—						
Deer Lodge	144,800	113,900	228,300	223,250	373,100	337,150
Granite	244,800	235,500	424,000	428,000	668,800	663,500
Mineral	29,900	44,600	35,300	33,250	65,200	77,850
Missoula	886,100	908,100	558,000	537,000	1,444,100	1,445,100
Powell	313,300	342,100	1,229,300	1,396,500	1,542,600	1,738,600
Ravalli	1,073,400	782,100	1,131,500	1,137,000	2,204,900	1,919,100
CENTRAL—						
Broadwater	389,900	486,900	679,000	684,500	1,068,900	1,171,400
Cascade	2,214,100	1,925,500	1,556,000	1,688,000	3,770,100	3,613,500
Fergus	4,248,500	6,290,800	2,271,500	2,315,500	6,520,000	8,606,300
Golden Valley	476,000	557,200	492,500	527,000	968,500	1,084,200
Jefferson	270,500	277,600	510,000	507,000	780,500	784,600
Judith Basin	2,195,100	2,258,800	1,057,000	1,107,500	3,252,100	3,366,300
Lewis and Clark	460,300	431,800	1,348,000	1,395,500	1,808,300	1,827,300
Meagher	208,900	209,100	1,609,500	1,835,500	1,818,400	2,044,600
Musselshell	455,800	515,900	592,000	638,500	1,047,800	1,154,400
Wheatland	661,600	454,000	1,167,900	1,262,500	1,829,500	1,716,500
EAST CENTRAL—						
Dawson	855,000	1,752,500	755,600	814,000	1,610,600	2,566,500
Garfield	509,400	741,100	1,066,000	1,200,000	1,575,400	1,941,100
McCone	658,100	1,426,500	815,500	885,750	1,473,600	2,312,250
Prairie	418,800	1,028,500	550,500	602,300	969,300	1,630,800
Richland	1,194,100	4,104,400	760,000	780,500	1,954,100	4,884,900
Wibaux	437,000	1,385,200	352,200	368,000	789,200	1,753,200
SOUTHWESTERN—						
Beaverhead	757,700	827,400	3,152,900	3,205,000	3,910,600	4,032,400
Madison	822,300	976,600	2,110,000	2,243,500	2,932,300	3,220,100
Silver Bow	70,500	71,000	313,500	320,200	384,000	391,200
SOUTH CENTRAL—						
Carbon	1,065,900	1,643,200	967,000	980,800	2,032,900	2,624,000
Gallatin	2,004,600	2,265,700	1,136,000	1,111,150	3,140,600	3,376,850
Park	793,200	778,400	1,115,500	1,158,300	1,908,700	1,936,700
Stillwater	939,600	1,541,300	971,500	1,058,800	1,911,100	2,600,100
Sweet Grass	657,800	832,100	1,321,400	1,442,800	1,979,200	2,274,900
Yellowstone	3,344,600	4,527,900	1,366,500	1,417,200	4,711,100	5,945,100
SOUTHEASTERN—						
Big Horn	1,090,800	1,278,400	1,529,400	1,473,200	2,620,200	2,751,900
Carter	183,600	329,600	1,301,000	1,462,500	1,484,600	1,792,100
Custer	260,300	482,500	1,039,000	1,053,200	1,299,300	1,535,700
Fallon	485,200	1,300,800	545,700	582,000	1,030,900	1,882,800
Powder River	180,600	248,200	1,227,500	1,202,500	1,408,100	1,450,700
Rosebud	366,200	864,500	1,158,400	1,269,800	1,524,600	2,134,300
Treasure	422,000	514,200	343,500	361,500	765,500	875,700
Total	46,784,300	74,367,000	50,872,000	53,814,000	97,656,000	128,181,000

NOTE: The above valuations are computed by the Montana State Department of Agriculture in co-operation with the Federal Statistician from U. S. Department of Agriculture statistics of production and farm value and State Farm Census returns.

How Montana Crops are Shipped.

Figure VI shows the monthly percentage of seasonal carlot shipments for eight principal Montana crops, and is based on carlot shipments as reported to the Montana State Railroad Commission during the period August 1920 to July 1924. The monthly percentage for each crop is the average moved in that month during this four year period, and the monthly percentage for all crops is the percentage that moved each month of the total (140,425) cars. It will be noted that various crops reach peaks in different months, but that the large ratio of wheat shipments to the total, brings the weighted trend of all crops quite closely to that of wheat. Both apples and potatoes reach a very high peak in October and fall off sharply during the winter months, potatoes recovering to a secondary peak in April, but apples falling off to a minimum. A secondary peak appears in April for potatoes and in May for flax. With the former a cleaning up of pit-stored stocks occurs about this time, and with flax, seed demand appears to be partly responsible for increased spring shipments. Hay shipments reach a peak in March when demand for winter feed appears to reach a maximum, while both corn and oats tend to follow hay, indicating the extent to which they supplement hay as feed.

Farm Prices 1923 and 1924.

On page 11 is reproduced a table of prices for important farm products in Montana by months for 1923 and 1924. These averages are estimates of the U. S. Bureau of Agricultural Economics, and are made as of date the 15th of each month. They are what are termed farm prices, and seek to show prices at the farm as distinguished from market prices.

Figure VI.

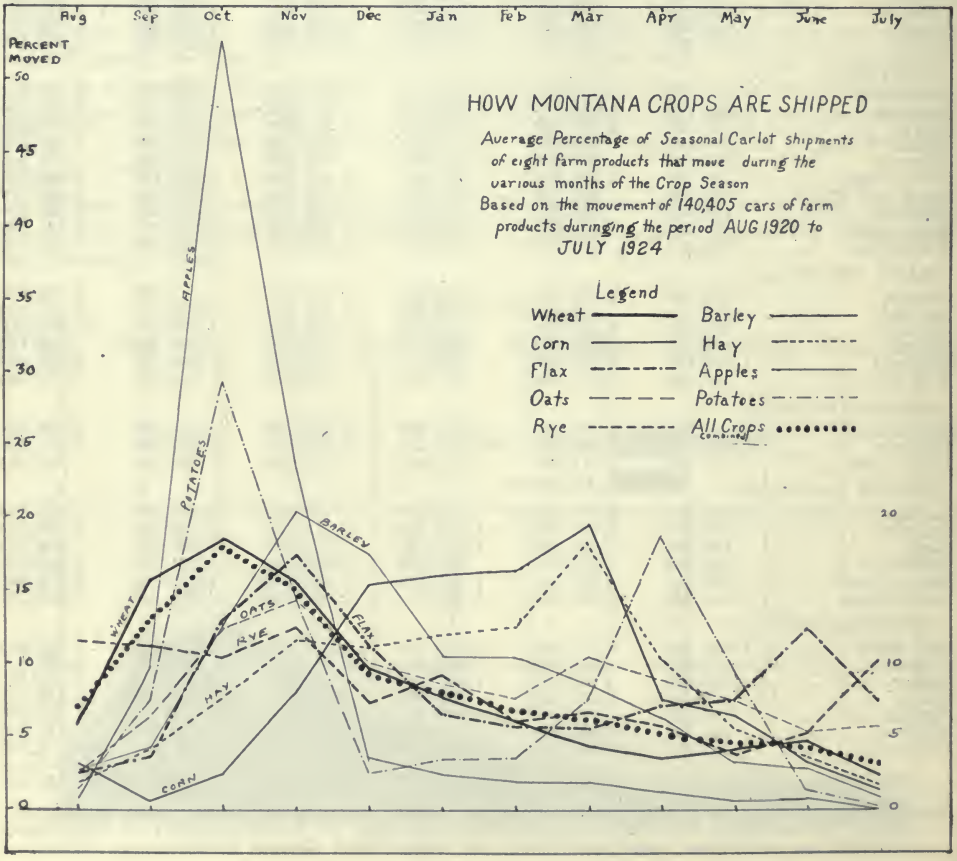


Table III.

MONTANA MONTHLY FARM PRICES—1923 and 1924.
Estimated Prices of Important Products as of Date the 15th of Each Month.

COMMODITY:	January		February		March		April		May		June		July		August		September		October		November		December	
	1923	1924	1923	1924	1923	1924	1923	1924	1923	1924	1923	1924	1923	1924	1923	1924	1923	1924	1923	1924	1923	1924	1923	1924
Wheat [1]	.97	.89	.96	.90	.94	.95	.97	.91	1.00	.95	.94	.98	.86	1.10	.88	1.16	.92	1.04	.92	1.27	.88	1.23	.82	1.38
Corn [1]	.54	.62	.56	.65	.56	.72	.78	.68	.86	.67	.78	.70	.72	.82	.77	.90	.75	.87	.68	1.00	.65	.93	.65	1.02
Oats [1]	.38	.40	.38	.40	.41	.43	.50	.44	.53	.46	.53	.44	.51	.41	.45	.43	.40	.42	.36	.48	.37	.45	.38	.45
Barley [1]	.48	.50	.54	.49	.62	.55	.70	.54	.68	.50	.62	.55	.56	.54	.48	.54	.46	.60	.45	.64	.47	.71	.48	.71
Rye [1]	.62	.50	.62	.50	.65	.54	.66	.50	.62	.50	.48	.54	.44	.64	.49	.60	.48	.65	.44	.90	.48	.95	.51	1.02
Flaxseed [1]	2.11	2.05	.....	2.10	.....	2.15	2.28	2.04	2.74	2.10	2.35	2.10	2.14	2.10	2.08	2.02	2.03	1.95	2.06	2.05	2.02	2.20	1.93	2.20
Potatoes [1]	.54	.80	.52	.82	.48	.75	.47	.80	.50	.86	.58	1.00	.92	1.40	1.08	2.00	.84	.99	.76	.94	.74	.90	.73	.85
Hay [2] (loose)	7.65	10.00	8.20	9.80	9.20	9.20	9.40	9.00	9.25	8.50	9.55	8.20	9.30	8.30	8.50	8.80	8.50	8.50	8.55	9.50	8.50	11.00	8.50	10.00
Butter [3]	.42	.42	.41	.41	.39	.39	.38	.38	.37	.32	.34	.32	.31	.35	.34	.36	.38	.36	.40	.36	.42	.40	.43	.41
Eggs [4]	.44	.38	.29	.31	.25	.15	.17	.15	.18	.16	.17	.14	.17	.16	.19	.20	.25	.26	.31	.32	.44	.45	.50	.51
Chickens [3]	13.6	12.5	17.0	13.3	16.0	14.5	16.0	15.4	17.0	14.5	19.0	14.3	18.0	15.7	18.0	14.8	16.0	15.8	17.6	15.5	13.7	15.2	13.8	14.8
Beans [5]	3.50	3.80	3.40	3.60	3.60	3.60	3.70	3.90	4.00	3.70	3.30	3.50	4.10	3.70	3.90	3.70	3.10	3.25	3.60	3.15	3.40	3.30	3.70	3.80
Timothy [2]	13.00	12.00	14.70	11.50	14.00	11.00	13.00	11.50	14.10	.....	15.00	10.80	13.50	11.00	11.00	12.00	10.00	12.00	13.50	.....	14.00	17.50	12.50	.....
Clover [2]	13.00	11.00	13.40	11.00	14.00	.....	12.00	.....	14.00	.....	15.00	.....	13.00	.....	.....	9.00	.....	.....	10.30	10.20	10.50	14.00	11.50	.....
Alfalfa [2]	11.00	10.00	11.30	9.80	10.50	9.50	10.80	10.00	12.50	9.70	14.20	10.00	12.00	10.40	10.00	10.00	9.00	9.80	9.60	9.50	10.40	10.00	10.00	9.00
Prairie [2]	9.00	8.50	11.00	8.70	10.40	9.10	10.80	9.60	10.60	9.70	.....	9.20	9.60	9.00	.....	10.20	.....	10.00	8.00	.....	9.00	9.00	9.00	8.50
Clover Seed [5] (sold)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	14.00	.....	.....
Clover Seed [5] (bgt)	.....	15.00	.....	14.50	.....	.....	14.00	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Timothy [5] (sold)	.....	3.60	.....	.....	3.60	2.70	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Timothy [5] (bgt.)	.....	4.50	.....	5.00	.....	5.00	3.30	.....	.....	.....	.....	.....	.....	.....	.....	2.50	.....	.....	.....	.....	.....	3.50	.....	.....
Alfalfa [5] (sold)	11.60	12.30	11.50	12.00	12.40	12.00	12.50	11.80	12.00	11.40	12.20	12.00	12.30	13.00	.....	14.00	.....	.....	12.00	.....	12.40	.....	12.00	12.50
Alfalfa [5] (bght.)	.....	11.00	.....	13.80	14.80	14.50	14.50	14.00	15.00	14.00	.....	14.50	.....	14.00	.....	14.70	15.00	.....	15.70	.....	.....	14.50	14.10	15.00
Bran [2] (bought)	26.30	25.60	27.60	26.00	26.80	26.00	25.30	25.50	27.00	26.50	.....	26.80	30.60	25.00	28.30	28.00	26.00	27.00	25.10	30.00	26.70	28.00	26.80	31.00
Hogs [6]	7.60	6.30	7.60	6.30	7.60	6.30	7.70	6.20	7.60	6.40	7.50	6.30	7.50	6.10	7.10	7.50	7.40	8.00	7.60	8.00	6.50	7.60	6.60	7.70
Beef Cattle [6]	5.40	5.00	6.00	7.20	7.50	5.40	6.30	6.20	6.30	7.10	6.40	6.00	6.00	5.70	6.50	5.50	5.90	5.60	5.70	5.30	5.00	5.40	5.30	5.50
Veal Calves [6]	7.20	7.70	7.50	7.70	8.50	8.20	8.00	8.30	8.80	8.00	9.00	8.50	8.30	8.00	8.50	8.00	8.40	8.30	8.90	8.00	7.50	7.90	7.00	8.20
Sheep [6]	7.40	7.50	7.40	7.30	7.50	7.50	7.50	8.00	7.90	8.00	6.00	7.80	6.70	7.00	7.30	7.10	7.40	6.90	7.90	7.20	6.30	7.20	7.20	9.00
Lambs [6]	9.60	10.10	10.80	10.00	.....	9.00	10.20	10.10	11.00	10.50	10.50	10.40	10.20	9.00	9.40	10.00	9.90	9.80	10.50	10.50	9.50	10.30	10.20	11.00
Turkeys [6]	2.61	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	25.3	27.2	20.0	23.2
Wool, unwash [3]	.....	.38	.....	.40	.36	.39	.37	.39	.45	.40	.45	.39	.41	.39	.35	.36	.38	.38	.36	.39	.....	.41	.40	.43
Milk Cows [7]	50.00	53.00	54.40	51.00	57.00	49.00	55.80	51.00	62.00	52.00	65.00	51.00	65.40	52.00	60.00	54.00	58.60	55.00	60.80	55.00	58.00	57.00	56.00	55.00
Horses [7]	50.00	44.00	55.00	42.00	52.00	43.00	58.00	45.00	65.00	46.00	70.00	43.00	65.00	45.00	60.00	45.00	58.00	46.00	55.00	44.00	57.00	46.00	50.00	43.00
Apples [5]	.....	1.20	.....	1.25	.....	1.24	.....	1.20	.....	.....	.....	2.00	.....	.....	2.40	.....	1.31	1.35	1.51	1.25	1.22	.....	1.18	1.53
Apples *	.....	3.60	.....	3.75	.....	3.72	.....	3.60	.....	.....	.....	4.00	.....	.....	7.20	.....	3.93	4.05	4.53	3.75	3.66	.....	3.54	4.59

[1] Price in term of cents per bushel.
[2] Price in term of dollars per ton.
[3] Prcie in term of cents per pound.
[4] Price in term of cents per dozen.
[5] Price in term of dollars per bushel.
[6] Price in term of dollars per 100 pounds.
[7] Price in term of Dollars per head.
* Price in term of dollars per barrel.

Crop Production Statistics

Total Tonnage Produced 1924 and 1923.

Total tonnage of 10 principal crops, corn, all wheat, oats, barley, rye, flax, all hay, potatoes, beans and apples, aggregated 5,278,721 tons in 1924 compared with 5,092,389 tons in 1923, an increase of about 3.7 per cent. Actual total tonnage of all crops considering the very high ratio of those named above to the total, would be but slightly larger in both years. From a crop production standpoint, 1924 returned more gross tons than any preceding year in the state's history, 1923 having held that same record. It follows that both years were very favorable ones, yet both were not without poor spots in some sections of the state. In 1923 the eastern and northeastern counties suffered reduction in grain yields as a result of dry weather in early June and later rust damage. In 1924 this area has out-yielded any recent year, and although more extensive dry weather damage than in 1923 developed in central sections of the state and in most of the area west of the continental divide, the gain in tonnage in the eastern third of the state more than offset this situation. In the following table, production estimates of all crops have been reduced to tons for better comparison of total crop out-turn of both years.

CROP:	1924 Tonnage	1923 Tonnage (Revised)
Corn	257,544	265,720
All Wheat	1,550,040	1,431,240
Oats	317,614	355,344
Barley	74,400	64,372
Rye	49,000	48,048
Flax	57,853	20,295
All Hay	2,848,000	2,756,000
Potatoes	97,680	118,800
Beans	12,240	7,920
Apples	14,350	24,750
Total	5,278,721	5,092,389

Acreage Shifts 1924.

Total acres devoted to eleven crops in 1924 numbered 6,904,000 compared with 6,545,000 acres in 1923 and 6,774,000 acres the average total of these crops for the five year period 1920-1924. Total acreage in 1924 of the crops named was 5.4 per cent larger than in 1923 and 1.9 per cent larger than their five-year average.

Acreages of corn, winter wheat, barley, flax, tame hay, beans and potatoes increased in 1924 compared with 1923, while decreases were recorded for spring wheat and rye, with oats and wild hay acreages unchanged. During the five year period, corn, barley, rye, tame hay and beans have increased rather widely from their 1920 basis, while both winter and spring wheat show moderately strong reductions. This has been largely the effect of post-war conditions, and Montana farmers who were operating almost exclusively as wheat growers in 1920 have diversified appreciably during the past five years. Among crops not mentioned above are sugar beets and canning and seed peas which in recent years have made substantial acreage gains.

Reduction in spring wheat acreage in 1924 came largely as a result of dissatisfaction with prevailing prices at seeding time, winter wheat acreage being larger by reason of a smaller winter abandonment. Part of the wheat acreage was devoted to more oats and barley. Rye also was decreased in 1924 as a result of market prices, and flax was greatly increased to provide a cash crop to supplement wheat. Corn acreage following a very successful year in 1923 was also increased strongly, although the crop has probably suffered somewhat in popularity by this year's experience with a very poor brand of corn weather.

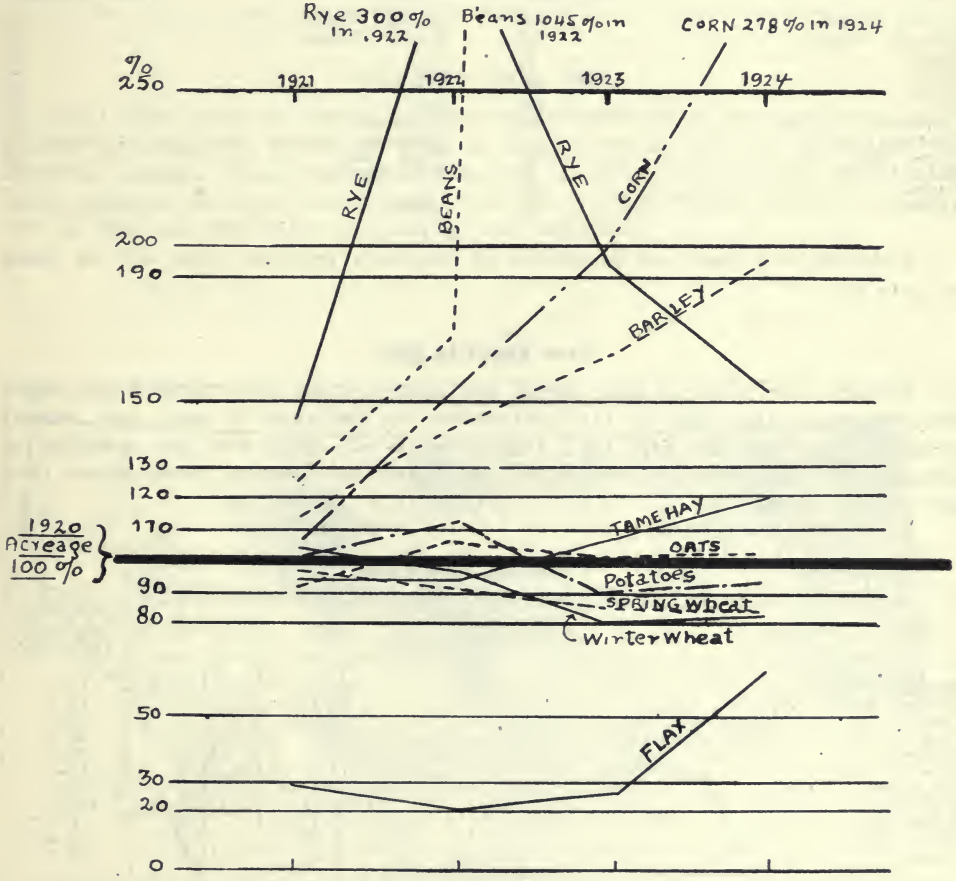
Tame hay is another crop the acreage of which has trended upwards in recent years. The bulk of the tame hay in the state is alfalfa and grain hay, and it is in the former that a good share of the increase has occurred.

Acreage Trends Since 1920.

A study of acreage tendencies during the past five years is shown in Figure VII which depicts various crop acreages for the years 1921, 1922, 1923 and 1924, as a percentage of their 1920 acreages, shown in the graph as 100 per cent.

The diversification trend of this period is shown by the increases in feed crops of corn, oats, barley and tame hay to balance a curtailment of wheat acreage. Rye shows a big increase in 1922 that was not followed through as was the case of the other crops named. The bulk of the rye crop is grown as a farm feed, although varying percentages are marketed when prices are attractive. As a feed crop rye has been losing apparently in favor of corn and barley. Prices until last fall (1924) have not been favorable for its production as a cash crop. Flax acreage which was reduced sharply during the first two years of this period recovered strongly in 1923 and 1924 due to favorable yields and good market prices.

Figure VII



The graph above shows acreage of important crops in 1921, 1922, 1923 and 1924 as a percentage of their 1920 base acreages, considered as 100 per cent, and depicts the diversification tendencies of the period.

Production Shifts 1924.

Larger crops of spring wheat, winter wheat, barley, rye, flax, tame hay, and beans were secured in 1924 compared with 1923. In the case of spring wheat and rye the larger production came from an acreage smaller than in 1923. In other cases acreage increases were largely responsible. Corn, oats, potatoes, wild hay and apples gave smaller production than in 1923, although this reduction was relatively unimportant except in the case of apples, which as a result of a heavy June freeze in the important Bitter Root valley, suffered a 42 per cent cut in the total crop. Corn production in spite of a greatly increased acreage, fell somewhat below the 1923 crop when final yields were tabulated, the past season having been one of the most unfavorable for corn in the state history of the crop. Wild hay, although yielding highly in the eastern half of the state, was a failure in many sections of the western half as a result of dry weather, especially in the southwestern counties.

Production of crops in 1924 compared with their five year average out-turns was also higher in most cases, as the following table shows:

CROP:	1924 Out-turn as Percentage of 1923 Crop.
Spring Wheat	109
Winter Wheat	103
Corn	97
Oats	89
Barley	116
Rye	102
Flaxseed	260
Potatoes	82
Tame Hay	104
Wild Hay	99
Beans	154
Apples	58

CROP:	1924 Out-turn as Percentage of 5-Year Average.
Spring Wheat	110
Winter Wheat	94
Corn	152
Oats	111
Barley	148
Rye	99
Flaxseed	215
Potatoes	74
Tame Hay	110
Wild Hay	101
Apples	72

Statistics of acreage and production of Montana's principal crops will be found in table IV.

Acre Yields in 1924.

Average acre yields of both spring and winter wheat, rye, flaxseed and beans were larger in 1924 than in 1923 and smaller in the case of corn, oats, barley, potatoes, tame hay and wild hay. Differences in all cases with the exception of potatoes were moderate as between the two years, both seasons being better than the 5-year average.

YIELDS PER ACRE.

CROP:	1924.	1923	Five-Year Average. (1920-1924)
Spring Wheat	16.2	14.0	13.3
Winter Wheat	17.1	17.0	15.1
Corn	18.0	26.0	20.1
Oats	29.5	33.0	28.1
Barley	25.0	25.5	22.8
Rye	14.0	11.0	11.6
Flaxseed	8.7	8.2	6.3
Potatoes	88.0	110.0	109.8
Tame Hay*	1.71*	1.88*	1.76*
Wild Hay*	0.90*	0.91*	0.89*
Beans	12.0	11.5	12.2

*Yields per acre for hay in tons; other crops in units of bushels.

Acre Values of Crops in 1924.

Acre values which are acre yields times average farm prices received for crops were in all cases higher in 1924 than in 1923 due to a generally higher level of farm prices than prevailed in the latter season. The 1924 values also ran well above average values for the preceding five years.

ACRE VALUES.

(Average Acre Yield Times Farm Price per Bushel or Ton.)

CROP	1924.	1923.	Average. 1920–1924.
Spring Wheat	$20.09	$11.48	$13.48
Winter Wheat	21.20	13.94	15.18
Corn	17.82	16.90	14.13
Oats	13.87	12.54	11.52
Barley	17.25	12.24	13.19
Rye	12.74	5.61	8.10
Flaxseed	19.23	15.83	12.16
Potatoes	76.56	71.50	81.19
Tame Hay	17.10	16.73	17.62
Wild Hay	8.10	7.28	7.60
Beans	39.60	39.10	.....

Total Farm Value 1924.

Total farm values of eleven principal crops produced in 1924 aggregate $124,239,000 compared with $86,862,000 value of these crops in 1923 and $84,449,000 the 1918-1922 average. The hypothetical values of all crops based on the ratio of the crops named to all crops in the census year 1919 are $144,463,000 for 1924, $100,536,000 for 1923, and $98,197,000 the average for 1918-1922.

Figure VIII.

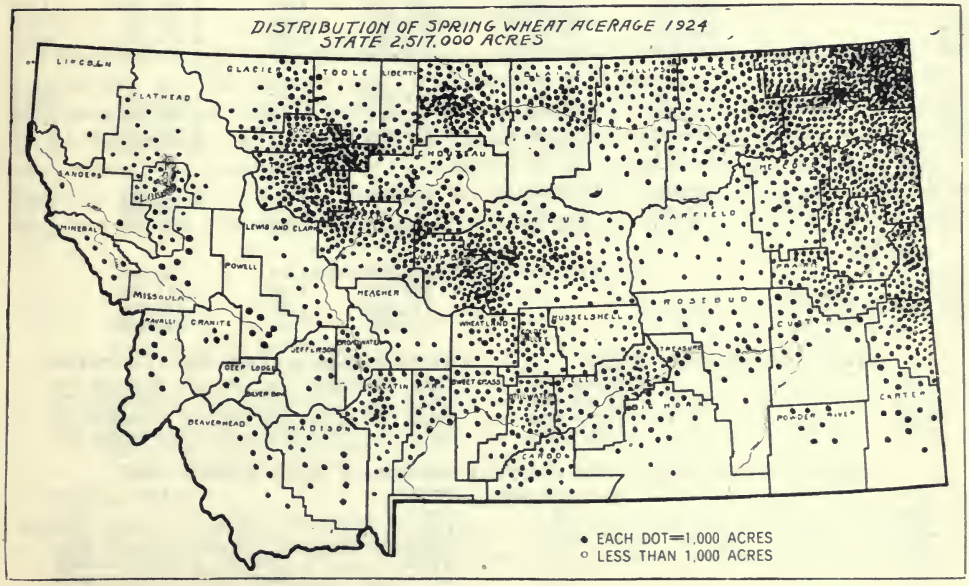


Table IV.

GENERAL SUMMARY OF MONTANA CROPS.
Acreage, Production and Farm Value, 1924-23-22-21.

YEAR:	Acres	Yield per Acre	Production	Dec. 1 Price	Farm Value	Acre Value
CORN:						
1924	511,000	18.0 bu.	9,198,000	$ .99	$ 9,106,000	$17.82
1923	365,000	26.0 bu.	9,490,000	.65	6,168,000	16.90
1922	228,000	24.3 bu.	5,540,000	.53	2,936,000	12.88
1921	190,000	20.0 bu.	3,800,000	.67	2,546,000	13.40
WINTER WHEAT:						
1924	637,000	17.1 bu.	10,893,000	1.24	13,507,000	21.20
1923	624,000	17.0 bu.	10,608,000	.82	8,699,000	13.94
1922	768,000	15.2 bu.	11,674,000	.89	10,390,000	13.53
1921	800,000	14.0 bu.	11,200,000	.85	9,520,000	11.90
SPRING WHEAT:						
1924	2,517,000	16.2 bu.	40,775,000	1.24	50,561,000	20.09
1923	2,650,000	14.0 bu.	37,100,000	.82	30,422,000	11.48
1922	2,850,000	14.4 bu.	41,040,000	.89	36,526,000	12.82
1921	2,990,000	12.0 bu.	35,880,000	.85	30,498,000	10.20
OATS:						
1924	673,000	29.5 bu.	19,854,000	.47	9,331,000	13.86
1923	673,000	33.0 bu.	22,209,000	.38	8,439,000	12.54
1922	660,000	32.0 bu.	21,120,000	.37	7,814,000	11.84
1921	618,000	24.0 bu.	14,832,000	.34	5,043,000	8.16
BARLEY:						
1924	124,000	25.0 bu.	3,100,000	.69	2,139,999	17.25
1923	105,000	25.5 bu.	2,678,000	.48	1,285,000	12.24
1922	92,000	25.0 bu.	2,300,000	.50	1,150,000	12.50
1921	75,000	20.5 bu.	1,538,000	.60	923,000	12.30
RYE:						
1924	125,000	14.0 bu.	1,750,000	.91	1,593,000	12.74
1923	156,000	11.0 bu.	1,716,000	.51	875,000	5.61
1922	240,000	14.0 bu.	3,360,000	.54	1,814,000	7.56
1921	116,000	11.2 bu.	1,299,000	.53	688,000	5.94
FLAXSEED:						
1924	270,000	8.7 bu.	2,349,000	2.21	5,191,000	19.23
1923	110,000	8.2 bu.	902,000	1.93	1,241,000	15.83
1922	84,000	7.2 bu.	605,000	1.97	1,192,000	14.18
1921	110,000	5.0 bu.	550,000	1.40	770,000	7.00
TAME HAY:						
1924	1,323,000	1.71 tons	2,260,000	10.00	22,600,000	17.10
1923	1,150,000	1.88 tons	2,162,000	8.90	19,242,000	16.73
1922	1,045,000	1.89 tons	1,975,000	9.00	17,775,000	17.01
1921	1,045,000	1.80 tons	1,881,000	8.70	16,365,000	15.66
WILD HAY:						
1924	653,000	.90 tons	588,000	9.00	5,292,000	8.10
1923	653,000	.91 tons	594,000	8.00	4,752,000	7.28
1922	660,000	.90 tons	594,000	8.00	4,752,000	7.20
1921	657,000	.80 tons	526,000	8.60	4,524,000	6.88
POTATOES:						
1924	37,000	88 bu.	3,256,000	.87	2,833,000	76.56
1923	36,000	110 bu.	3,960,000	.65	2,574,000	71.50
1922	45,000	126 bu.	5,670,000	.40	2,268,000	50.40
1921	41,000	115 bu.	4,715,000	.80	3,772,000	92.00
BEANS:						
1924	34,000	12.0 bu.	408,000	3.30	1,346,000	39.60
1923	23,000	11.5 bu.	264,000	3.70	977,000	39.10
1922	3,800	13.0 bu.	49,000	3.20	157,000	41.60
APPLES:						
1924			574,000	1.29	740,000	.....
1923			990,000	1.30	1,287,000	.....
1922			610,000	1.00	610,000	.....
1921			975,000	1.50	1,465,000	.....

VALUE OF ABOVE CROPS.

1924	$124,239,000
1923	86,461,000
1922	87,227,000
1921	76,114,000

THEORETICAL VALUE OF ALL CROPS.

1924	$144,463,000
1923	100,536,000
1922	93,580,000
1921	81,430,000

ESTIMATED PERCENTAGE SOLD OF MONTANA MAIN CROPS, 1924.

CROP:	Per cent Sold	CROP:	Per cent Sold
Wheat	85.0	Corn	10.0
Oats	20.0	Hay	15.0
Barley	15.0	Potatoes	35.0
Rye	20.0	Apples	27.0
Flax	93.8	All Crops Combined	60.0

Durum Wheat Production.

Included in statistics of acreage, yield and production of all spring wheat is a small proportion of durum. To distinguish this wheat which is used to make pastry and macaroni flour, from bread wheats, the Division of Crop Estimates in recent years has made separate estimates for durum as a percentage of all spring wheat. For the spring wheat states in 1923 and 1924, these estimates have been as follows:

STATE:	1923.			1924.		
	Acreage 000 Omitted	Per Acre Yield	Bushel Production 000 Omitted	Acreage 000 Omitted	Yield	Bushel Production 000 Omitted
Montana	128	10.2	1,306	76	18.0	1,368
North Dakota	3,667	9.1	33,370	3,040	16.0	48,640
South Dakota	1,275	12.0	15,300	1,174	14.9	17,493
Minnesota	225	12.7	2,858	126	21.5	2,709
Four States	5,295	10.0	52,834	4,416	15.9	70,210

PER CENT OF MONTANA SPRING WHEAT IN FEDERAL GRADES.
(Per Cent of Total Crop that Graded.)

CROP:	No. 1	No. 2	No. 3	No. 4	No. 5	No. 6
1924	84.0	10.0	5.0	1.0	.....	.....
1923	63.2	20.6	12.1	3.8	0.3	.....
1922	84.0	12.1	3.1	0.5	0.3	.....
1921	74.7	18.2	5.6	1.4	0.1	.....
1920	64.6	20.7	10.1	3.1	0.9	0.6

Montana is noted for the high milling quality of its spring wheat and usually leads all other states by a good margin excepting Wyoming, which is a much smaller producing state. Only 40.4 per cent of the entire spring wheat crop in the United States in 1924 graded number 1, while Montana's crop contained 84.0 per cent in that grade.

Dockage in Wheat.

Dockage in wheat, a serious problem in the older sections of the spring wheat region, has not yet become very troublesome in Montana where soils are newer and weed infection less. However, weeds ultimately become a dangerous loss factor to the farmer who operates wholly or largely in small grain crops, and it is well to take note of the present situation. A survey made recently through elevator men of the state gives the following averages for per cent of dockage in various sections of the state for the 1924 and 1923 crops. These figures are tentative*. (See note below).

DOCKAGE FOUND IN WHEAT.

DISTRICT:	Per Cent in 1924.	Per Cent in 1923.
Northwest—(4 counties)	1.9	2.3
West Central—(6 counties)	2.6	2.4
North Central—(8 counties)	1.4	1.9
Central—(10 counties)	2.7	3.4
South Central—(6 counties)	1.8	2.9
Northeast—(5 counties)	2.7	3.1
East Central—(6 counties)	3.9	4.0
Southeast—(7 counties)	1.3	1.6
State	2.53	2.96

NOTE—Those interested in further information concerning dockage in wheat for Montana and other states of the spring wheat region should write Mr. R. B. Black, in charge Grain Cleaning Division of U. S. Department of Agriculture, 404 Flour Exchange Bldg., Minneapolis, Minnesota.

Table V.

SPRING WHEAT—1923 and 1924.

District and County:	1923 Revised. Acreage	Acre Yield (bushel)	Production	1924 December Estimate. Acreage	Acre Yield (bushel)	Production
NORTHWESTERN—						
Flathead	23,000	21.0	483,000	21,000	17.3	363,000
Lincoln	2,000	20.0	40,000	2,000	10.0	20,000
Lake	20,000	21.0	420,000	20,000	15.0	300,000
Sanders	2,000	23.0	46,000	2,000	17.0	34,000
NORTH CENTRAL—						
Blaine	64,000	17.0	1,088,000	71,000	17.0	1,207,000
Chouteau	82,000	10.0	820,000	76,000	14.0	1,064,000
Glacier	28,000	14.0	392,000	33,000	10.0	330,000
Hill	120,000	8.0	960,000	115,000	13.0	1,495,000
Liberty	30,000	9.0	270,000	26,000	14.0	364,000
Pondera	91,000	19.0	819,000	95,000	13.0	1,235,000
Teton	111,000	23.0	2,553,000	114,000	14.0	1,569,000
Toole	21,000	6.0	126,000	21,000	12.0	252,000
NORTHEASTERN—						
Daniels	106,000	15.0	1,590,000	95,000	19.0	1,805,000
Phillips	73,000	12.0	876,000	65,000	13.0	845,000
Roosevelt	146,000	10.0	1,460,000	135,000	22.0	2,970,000
Sheridan	223,000	10.0	2,230,000	205,000	19.0	3,895,000
Valley	140,000	12.0	1,680,000	139,000	18.0	2,502,000
WEST CENTRAL—						
Deer Lodge	3,000	25.0	75,000	2,000	16.0	32,000
Granite	6,000	22.0	132,000	4,000	16.0	64,000
Missoula	15,000	25.0	375,000	8,000	27.0	216,000
Powell	7,000	19.0	133,000	6,000	16.0	96,000
Ravalli	9,000	27.0	243,000	8,000	22.0	176,000
CENTRAL—						
Broadwater	16,000	22.0	352,000	15,000	20.0	300,000
Cascade	93,000	23.0	2,139,000	95,000	12.0	1,140,000
Fergus	156,000	20.0	3,120,000	159,000	16.0	2,544,000
Golden Valley	29,000	12.0	348,000	26,000	10.0	260,000
Jefferson	8,000	19.0	152,000	7,000	17.0	119,000
Judith Basin	93,000	22.0	2,046,000	94,000	12.0	1,128,000
Lewis and Clark	15,000	21.0	315,000	12,000	16.0	192,000
Meagher	8,000	17.0	136,000	8,000	11.0	88,000
Musselshell	22,000	16.0	352,000	22,000	10.0	220,000
Wheatland	34,000	22.0	748,000	33,000	10.0	330,000
EAST CENTRAL—						
Dawson	105,000	9.0	945,000	87,000	15.0	1,305,000
Garfield	29,000	14.0	406,000	26,000	15.0	390,000
McCone	63,000	10.0	630,000	54,000	18.0	972,000
Prairie	64,000	8.0	612,000	56,000	14.0	784,000
Richland	124,000	8.0	992,000	127,000	21.0	2,667,000
Wibaux	63,000	8.0	504,000	60,000	16.5	990,000
SOUTHWESTERN—						
Beaverhead	10,000	23.0	230,000	9,000	19.0	171,000
Madison	17,000	26.0	442,000	14,000	27.0	378,000
SOUTH CENTRAL—						
Carbon	26,000	21.0	546,000	25,000	19.0	475,000
Gallatin	39,000	24.0	936,000	40,000	18.0	720,000
Park	25,000	25.0	625,000	21,000	18.0	378,000
Stillwater	45,000	15.0	675,000	44,000	15.0	660,000
Sweet Grass	22,000	20.0	440,000	19,000	18.0	342,000
Yellowstone	56,000	18.0	1,008,000	51,000	21.0	1,071,000
SOUTHEASTERN—						
Big Horn	20,000	17.0	340,000	20,000	18.0	360,000
Carter	17,000	10.0	170,000	12,000	16.0	192,000
Custer	18,000	10.0	180,000	17,000	14.0	238,000
Fallon	74,000	8.0	592,000	65,000	14.0	910,000
Powder River	8,000	14.0	112,000	7,000	18.0	126,000
Rosebud	23,000	10.0	230,000	24,000	16.0	384,000
Treasure	6,000	11.0	66,000	5,000	16.0	80,000
STATE TOTALS	2,650,000	14.0	37,100,000	2,517,000	16.2	40,775,000

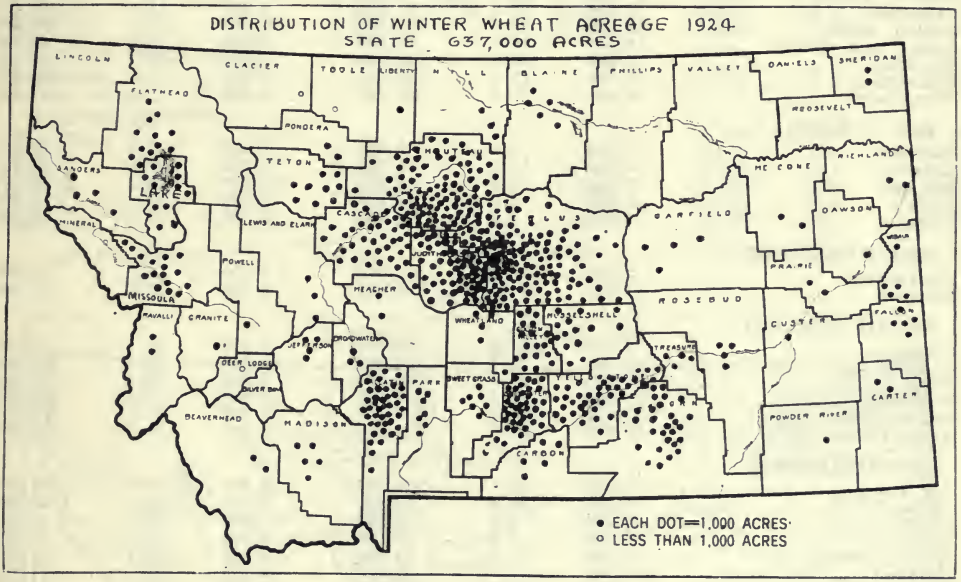
Spring Wheat.

Much of the spring wheat crop was again sown late due to the backward turn the season took in April and May. Moisture conditions, however, during the early stages of the crop were favorable for good root and stooling, especially throughout the eastern and northeastern districts where the bulk of the crop is grown. A cool growing season and absence of hot winds during the filling stage in this area resulted in unusually good yields. Grasshoppers or dry weather cut yields in various localities elsewhere in the north central, central and south central districts. Quality of the crop averaged better than last year and better than the five-year average.

Winter Wheat.

A reduction in acreage seeded in the fall of 1923 for the 1924 crop was followed by a lighter abandonment than in the preceding year and acreage harvested in 1924 was about 2 per cent larger than that of 1923. The crop entered the winter in relatively high condition and losses from winterkill and soil blowing were light and spotted. Spring growth was slow but thrifty and favorable weather was encountered during the filling stage in most districts. Final acre yields averaged 17.1 bushels, or slightly above the favorable yield of the 1923 crop.

Figure IX.



ESTIMATED WEIGHT PER MEASURED BUSHEL MONTANA GRAIN (Pounds).

	1919	1920	1921	1922	1923	1924
Winter Wheat	59.0	59.5	59.9	60.3	59.4	60.3
Spring Wheat	58.0	58.2	59.0	59.8	58.8	59.5
Oats	34.0	35.7	35.0	36.6	37.2	36.5
Barley	47.0	48.0	47.1	50.0	49.0	50.0

Table VI.

WINTER WHEAT BY COUNTIES—1923 and 1924.

District and County:	1923 Revised. Acreage	Acre Yield (bushel)	Production	1924 December Estimate. Acreage	Acre Yield (bushel)	Production
NORTHWESTERN—						
Flathead	13,00	21.0	273,000	12,000	23.0	276,000
Lake	8,000	21.0	168,000	9,000	23.0	207,000
Sanders	3,000	27.0	81,000	4,000	20.0	80,000
NORTH CENTRAL—						
Blaine	4,000	8.0	32,000	5,000	17.0	85,000
Chouteau	86,000	11.0	946,000	88,000	15.0	1,320,000
Hill	4,000	8.0	32,000	3,000	18.0	54,000
Pondera	2,000	13.0	26,000	2,000	13.0	26,000
Teton	9,000	16.0	144,000	9,000	18.0	162,000
NORTHEASTERN—						
Sheridan	2,000	12.0	24,000	2,000	17.0	34,000
WEST CENTRAL—						
Granite	1,000	20.0	20,000	1,000	15.0	15,000
Missoula	15,000	27.0	405,000	15,000	16.9	252,000
Powell	1,000	17.0	17,000	1,000	19.0	19,000
Ravalli	2,000	29.0	58,000	2,000	9.0	18,000
CENTRAL—						
Broadwater	2,000	18.0	36,000	3,000	18.0	54,000
Cascade	37,000	23.0	851,000	38,000	18.0	684,000
Fergus	129,000	17.0	2,193,000	136,000	20.3	2,762,000
Golden Valley	20,000	12.0	240,000	21,000	12.0	252,000
Jefferson	4,000	18.0	72,000	4,000	11.0	44,000
Judith Basin	56,000	17.0	952,000	58,000	17.0	986,000
Lewis and Clark	3,000	16.0	48,000	3,000	15.0	45,000
Meagher	2,000	17.0	34,000	2,000	16.0	32,000
Musselshell	13,000	17.0	221,000	14,000	17.0	238,000
Wheatland	4,000	17.0	68,000	4,000	12.0	48,000
EAST CENTRAL—						
Dawson	1,000	8.0	8,000	1,000	17.0	17,000
Garfield	4,000	12.0	48,000	4,000	18.0	72,000
McCone	2,000	9.0	18,000	2,000	13.0	26,000
Prairie	2,000	7.0	14,000	2,000	14.0	28,000
Wibaux	5,000	7.0	35,000	5,000	12.0	60,000
SOUTHWESTERN—						
Beaverhead	2,000	23.0	46,000	2,000	9.5	19,000
Madison	6,000	27.0	162,000	5,000	17.0	85,000
SOUTH CENTRAL—						
Carbon	5,000	17.0	85,000	5,000	19.0	95,000
Gallatin	43,000	25.7	1,107,000	42,000	18.0	756,000
Park	7,000	25.0	175,000	7,000	11.0	77,000
Stillwater	39,000	15.0	585,000	40,000	16.0	640,000
Sweet Grass	7,000	19.0	133,000	7,000	17.0	119,000
Yellowstone	35,000	17.0	595,000	36,000	16.0	576,000
SOUTHEASTERN—						
Big Horn	27,000	17.0	459,000	26,000	14.0	364,000
Carter	2,000	11.0	22,000	2,000	15.0	30,000
Custer	1,000	8.0	8,000	1,000	16.0	16,000
Fallon	6,000	7.0	42,000	5,000	15.0	75,000
Powder River	1,000	14.0	14,000	1,000	17.0	17,000
Rosebud	4,000	9.0	36,000	4,000	16.0	64,000
Treasure	5,000	15.0	75,000	4,000	16.0	64,000
STATE TOTALS	624,000	17.1	10,608,000	637,000	16.1	10,893,000

Flax.

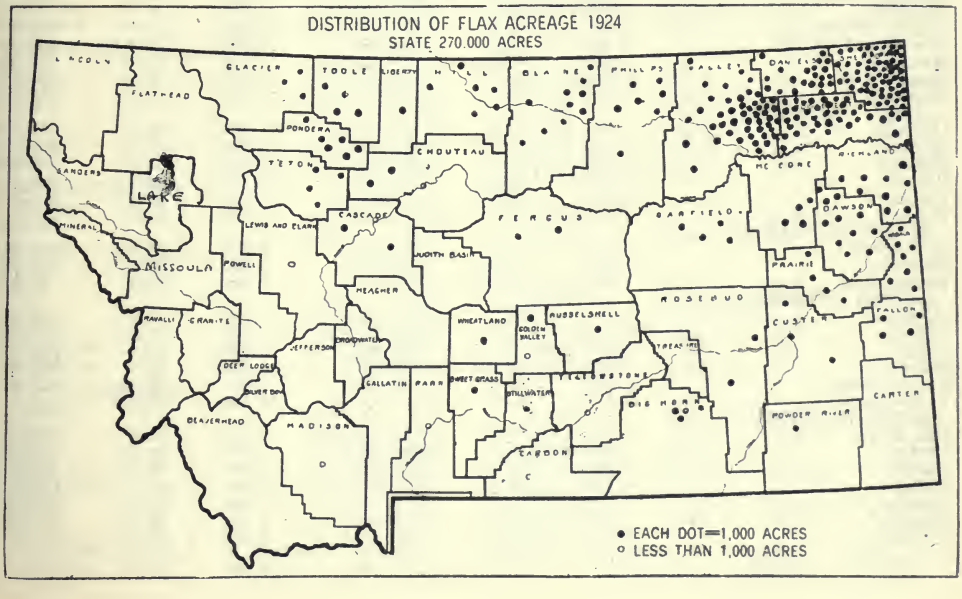
Flax as a cash crop assumed considerable importance in 1924 when its farm value increased to $5,191,000 from $1,741,000 in 1923. Greatly increased acreage and a slightly larger acre yield than in 1923 more than doubled the production for 1924. Flax is grown chiefly in the eastern and northeastern counties, although the past season brought a considerable spread in the distribution of this crop. Much of the crop is still grown on new breaking, although the practice of using flax on old ground in rotation systems is followed to some extent.

Table VII.

FLAX BY COUNTIES—1923 and 1924.

District and County:	1923 Revised. Acreage	Acre Yield (bushel)	Production	1924 December Estimate. Acreage	Acre Yield (bushel)	Production
NORTH CENTRAL—						
Blaine	4,000	9.5	38,000	10,000	8.0	80,000
Chouteau	.....	.....	.....	2,000	8.0	16,000
Glacier	1,400	5.0	7,000	3,000	6.0	18,000
Hill	3,000	7.0	21,000	6,000	5.0	30,000
Liberty	1,000	6.0	6,000	1,000	6.0	6,000
Pondera	1,000	7.0	7,000	6,000	6.0	36,000
Teton	1,500	8.0	12,000	4,000	4.0	16,000
Toole	2,000	4.5	9,000	3,000	7.0	21,000
NORTHEASTERN—						
Daniels	13,000	9.5	123,500	20,000	10.0	200,000
Phillips	2,000	7.0	14,000	7,000	8.0	56,000
Roosevelt	16,000	8.7	139,200	40,000	8.0	320,000
Sheridan	20,000	8.8	168,000	62,000	11.0	682,000
Valley	11,000	9.6	105,600	43,000	8.0	343,000
CENTRAL—						
Cascade	.....	.....	.....	2,000	10.0	20,000
Fergus	.....	.....	.....	2,000	10.0	20,000
Golden Valley	300	6.7	2,100	1,000	6.0	6,000
Musselshell	400	10.5	4,200	1,000	5.0	5,000
Wheatland	.....	.....	.....	1,000	7.0	7,000
EAST CENTRAL—						
Dawson	10,000	8.0	80,000	11,000	8.0	88,000
Garfield	3,500	9.0	31,500	4,000	7.0	28,000
McCone	2,000	8.2	16,400	4,000	8.0	32,000
Prairie	2,000	8.0	16,000	4,000	7.0	28,000
Richland	6,300	7.6	39,700	9,000	10.0	90,000
Wibaux	3,300	7.1	23,500	7,000	9.0	63,000
SOUTH CENTRAL—						
Stillwater	.....	.....	.....	1,000	7.0	7,000
Sweet Grass	.....	.....	.....	1,000	7.0	7,000
SOUTHEASTERN—						
Big Horn	.....	.....	.....	3,200	8.0	25,000
Carter	1,000	5.9	5,900	2,000	8.0	16,000
Custer	1,400	6.0	8,400	3,000	7.0	21,000
Fallon	3,000	5.3	15,900	4,000	10.0	40,000
Powder River	400	8.5	3,400	1,000	10.0	10,000
Rosebud	500	9.5	4,700	2,000	6.0	12,000
STATE TOTALS	110,000	8.2	902,000	270,000	8.7	2,349,000

Figure X.



Oats.

Production of oats in 1924 fell slightly below 1923 crop as a result of lower acre yields, acreage in 1924 having been increased moderately over that of 1923. Oats acreage shows a rather wide distribution over the state and much is grown in the country west of the main range where dry weather was responsible for reduced yields in the past season. Considerable oats acreage is also found just east of the main range where dry weather also reduced yields. 1924 out-turn on the other hand was somewhat better than average.

Table VIII.

OATS BY COUNTIES—1923 and 1924.

	1923 Revised.			1924 December Estimate.		
District and County:	Acreage	Acre Yield (bushel)	Production	Acreage	Acre Yield (bushel)	Production
NORTHWESTERN—						
Flathead	12,000	42.0	756,000	12,000	30.0	540,000
Lincoln	1,000	43.0	43,000	4,000	30.0	120,000
Lake	10,000	44.0	44,000	10,000	31.0	31,000
Sanders	2,000	45.0	90,000	2,000	29.0	58,000
NORTH CENTRAL—						
Blaine	15,000	34.0	510,000	18,000	31.0	558,000
Chouteau	12,000	30.0	360,000	12,000	24.0	288,000
Glacier	5,000	27.0	135,000	5,000	30.0	150,000
Hill	17,000	21.0	357,000	19,000	24.0	456,000
Liberty	2,000	27.0	54,000	2,000	24.0	48,000
Pondera	10,000	22.0	330,000	9,000	29.0	261,000
Teton	13,000	33.0	429,000	12,000	23.0	276,000
Toole	3,000	22.0	66,000	3,000	21.0	63,000
NORTHEASTERN—						
Daniels	28,000	33.0	924,000	28,000	34.0	952,000
Phillips	21,000	34.0	714,000	21,000	21.0	441,000
Roosevelt	25,000	27.0	675,000	25,000	35.0	875,000
Sheridan	47,000	27.0	1,269,000	47,000	34.0	1,598,000
Valley	32,000	28.0	896,000	32,000	35.0	1,120,000
WEST CENTRAL—						
Deer Lodge	3,000	51.0	153,000	2,000	30.0	60,000
Granite	3,000	46.0	138,000	4,000	30.0	120,000
Mineral	1,000	45.0	45,000	1,000	30.0	30,000
Missoula	6,000	50.0	450,000	5,000	30.0	240,000
Powell	7,000	38.0	266,000	7,000	27.0	189,000
Ravalli	10,000	61.0	610,000	9,000	30.1	271,000
CENTRAL—						
Broadwater	10,000	46.0	460,000	10,000	26.0	260,000
Cascade	13,000	37.0	481,000	13,000	25.0	325,000
Fergus	52,000	38.0	1,976,000	50,000	30.0	1,500,000
Golden Valley	12,000	24.0	288,000	12,000	15.0	180,000
Jefferson	3,000	48.0	144,000	3,000	34.0	102,000
Judith Basin	12,000	42.0	504,000	11,000	28.0	308,000
Lewis and Clark	6,000	33.0	198,000	6,000	27.0	162,000
Meagher	5,000	36.0	180,000	5,000	29.0	145,000
Musselshell	12,000	29.0	348,000	11,000	20.0	220,000
Wheatland	7,000	35.0	245,000	7,000	25.0	175,000
EAST CENTRAL—						
Dawson	21,000	25.0	525,000	22,000	30.0	660,000
Garfield	15,000	31.0	465,000	15,000	27.0	405,000
McCone	17,000	24.0	408,000	18,000	31.0	558,000
Prairie	10,000	21.0	210,000	10,000	28.0	280,000
Richland	26,000	23.0	598,000	26,000	31.0	806,000
Wibaux	16,000	25.0	400,000	17,000	30.0	510,000
SOUTHWESTERN—						
Beaverhead	9,000	47.0	423,000	9,000	29.0	261,000
Madison	10,000	49.0	490,000	9,000	32.0	288,000
Silver Bow	1,000	32.0	32,000	1,000	20.0	20,000
SOUTH CENTRAL—						
Carbon	7,000	51.0	357,000	7,000	40.0	280,000
Gallatin	19,000	50.0	950,000	19,000	39.0	741,000
Park	9,000	49.0	441,000	8,000	37.0	296,000
Stillwater	16,000	27.0	432,000	15,000	28.0	420,000
Sweet Grass	7,000	37.0	259,000	7,000	31.0	217,000
Yellowstone	17,000	34.0	578,000	16,000	33.0	528,000
SOUTHEASTERN—						
Big Horn	8,000	33.0	264,000	9,000	12.0	108,000
Carter	8,000	30.0	240,000	8,000	30.0	240,000
Custer	9,000	23.0	207,000	8,000	30.0	240,000
Fallon	20,000	24.0	480,000	20,000	26.1	522,000
Powder River	2,000	29.0	58,000	2,000	27.0	54,000
Rosebud	7,000	26.0	182,000	8,000	29.0	232,000
Treasure	2,000	36.0	72,000	2,000	29.0	58,000
STATE TOTALS	673,000	33.0	22,209,000	673,000	29.5	19,854,000

Barley.

Barley production in 1924 exceeded that of 1923 by reason of expanded acreage, acre yield falling slightly below that of 1923. The crop is grown chiefly as a farm feed and the small acreage is well distributed over the state.

Table IX.

BARLEY BY COUNTIES—1923 and 1924.

District and County:	1923 Revised. Acreage	1923 Revised. Acre Yield (bushel)	1923 Revised. Production	1924 December Estimate. Acreage	1924 December Estimate. Acre Yield (bushel)	1924 December Estimate. Production
NORTHWESTERN—						
Flathead	7,000	35.0	245,000	7,000	30.0	210,000
Lincoln	1,000	26.0	26,000	1,000	27.0	27,000
Lake	8,000	30.3	242,000	8,000	32.4	259,000
Sanders	1,000	30.0	30,000	1,000	24.0	24,000
NORTH CENTRAL—						
Blaine	2,000	22.0	44,000	2,000	27.0	54,000
Chouteau	1,000	17.0	17,000	1,000	19.0	19,000
Glacier	1,000	25.0	25,000	1,000	20.0	20,000
Hill	2,000	13.0	26,000	3,000	22.0	66,000
Pondera	5,000	29.0	145,000	5,000	24.0	120,000
Teton	2,000	26.0	52,000	3,000	21.0	63,000
NORTHEASTERN—						
Daniels	1,000	20.0	20,000	1,000	26.0	26,000
Phillips	1,000	22.0	22,000	1,000	21.0	21,000
Roosevelt	1,000	17.0	17,000	2,000	30.0	60,000
Sheridan	3,000	20.0	60,000	3,000	31.0	93,000
Valley	2,000	21.0	42,000	3,000	27.0	81,000
WEST CENTRAL—						
Granite	1,000	28.0	28,000	1,000	19.0	19,000
Missoula	2,000	32.0	64,000	3,000	16.0	48,000
Powell	1,000	28.0	28,000	1,000	11.0	11,000
Ravalli	2,000	34.0	68,000	2,000	32.0	64,000
CENTRAL—						
Broadwater	1,000	27.0	27,000	2,000	17.0	34,000
Cascade	3,000	29.0	87,000	3,000	22.0	66,000
Fergus	8,000	28.0	224,000	9,000	25.0	225,000
Golden Valley	1,000	21.0	21,000	1,000	13.0	13,000
Jefferson	.....	.....	.....	1,000	24.0	24,000
Judith Basin	4,000	29.0	116,000	4,000	21.0	84,000
Lewis and Clark	1,000	25.0	25,000	1,000	25.0	25,000
Meagher	1,000	20.0	20,000	1,000	22.0	22,000
Musselshell	1,000	23.0	23,000	1,000	13.0	13,000
Wheatland	1,000	22.0	22,000	1,000	30.0	30,000
EAST CENTRAL—						
Dawson	2,000	20.0	40,000	2,000	24.0	48,000
Garfield	1,000	17.0	17,000	1,000	21.0	21,000
McCone	1,000	16.0	16,000	2,000	21.0	42,000
Prairie	1,000	15.0	15,000	2,000	27.0	54,000
Richland	3,000	21.0	63,000	4,000	28.0	96,000
Wibaux	1,000	16.0	16,000	2,000	27.0	54,000
SOUTHWESTERN—						
Beaverhead	3,000	30.0	90,000	4,000	18.0	72,000
Madison	2,000	30.0	60,000	3,000	30.0	90,000
SOUTH CENTRAL—						
Carbon	2.00	32.0	64,000	2,000	34.0	68,000
Gallatin	1,000	32.0	32,000	2,000	30.0	60,000
Park	6,000	30.0	180,000	7,000	27.0	189,000
Stillwater	2,000	20.0	40,000	2,000	25.0	50,000
Sweet Grass	1,000	24.0	24,000	2,000	24.0	48,000
Yellowstone	3,000	23.0	69,000	3,000	32.3	97,000
SOUTHEASTERN—						
Big Horn	1,000	16.0	16,000	1,000	23.0	23,000
Carter	2,000	16.0	32,000	3,000	26.0	78,000
Custer	1,000	16.0	16,000	1,000	16.0	16,000
Fallon	4,000	17.0	68,000	5,000	23.0	115,000
Powder River	1,000	16.0	16,000	1,000	17.0	17,000
Rosebud	1,000	15.0	15,000	1,000	19.0	19,000
Treasure	1,000	20.0	20,000	1,000	22.0	22,000
STATE TOTALS	105,000	23.2	2,678,000	124,000	25.0	3,100,000

Rye.

Rye production in 1924 was slightly larger than in 1923, a higher acre yield more than offsetting a moderate acreage reduction. Winter rye makes up the bulk of the crop. Rye grown principally as a feed crop is also a good cash crop in years of fair market prices and substitutes for winter wheat in sections where the latter does not winter through. North central Montana has a good share of the state's total acreage.

Table X.

RYE BY COUNTIES—1923 and 1924.

District and County:	1923 Revised. Acreage	1923 Revised. Acre Yield (bushel)	1923 Revised. Production	1924 December Estimate. Acreage	1924 December Estimate. Acre Yield (bushel)	1924 December Estimate. Production
NORTHWESTERN—						
Flathead	2,200	21.5	47,000	1,000	16.0	16,000
Lincoln	600	21.7	13,000	1,000	12.0	12,000
Lake	1,000	23.7	24,000	1,000	16.0	16,000
Sanders	1,200	20.0	24,000	1,000	7.0	7,000
NORTH CENTRAL—						
Blaine	30,000	8.0	240,000	33,000	15.0	495,000
Chouteau	9,000	11.7	105,000	8,000	10.0	80,000
Glacier	1,000	9.0	9,000	2,000	12.0	24,000
Hill	12,000	6.0	72,000	11,000	10.0	110,000
Liberty	1,400	5.7	8,000	.....	.....	.....
Pondera	1,400	13.6	19,000	.....	.....	.....
Teton	4,000	14.5	58,000	3,000	12.0	36,000
Toole	1,500	8.0	12,000	1,000	10.0	10,000
NORTHEASTERN—						
Daniels	5,000	9.0	45,000	4,000	18.5	74,000
Phillips	8,000	9.0	72,000	6,000	9.0	54,000
Roosevelt	12,000	9.2	111,000	10,000	22.7	227,000
Sheridan	9,000	9.7	87,000	7,000	18.0	126,000
Valley	36,000	10.6	38,000	3,000	12.0	36,000
WEST CENTRAL—						
Deer Lodge	200	20.0	4,000	.....	.....	.....
Granite	400	20.0	8,000	.....	.....	.....
Mineral	100	20.0	2,000	.....	.....	.....
Missoula	1,200	23.3	28,000	1,000	15.0	15,000
Powell	500	18.0	9,000	.....	.....	.....
Ravalli	700	21.4	15,000	.....	.....	.....
CENTRAL—						
Broadwater	800	12.5	10,000	.....	.....	.....
Cascade	1,500	16.7	25,000	.....	.....	.....
Fergus	9,000	12.0	108,000	5,000	15.0	75,000
Golden Valley	1,200	12.5	15,000	.....	.....	.....
Jefferson	1,000	18.0	18,000	.....	.....	.....
Judith Basin	600	16.7	10,000	1,000	15.0	15,000
Lewis and Clark	1,000	21.0	21,000	1,000	20.0	20,000
Meagher	1,000	16.0	16,000	1,000	10.0	10,000
Musselshell	1,600	17.5	28,000	2,000	7.0	14,000
Wheatland	600	16.7	10,000	1,000	13.0	13,000
EAST CENTRAL—						
Dawson	1,100	10.6	12,000	1,000	14.0	14,000
Garfield	3,000	10.2	31,000	2,000	11.0	22,000
McCone	2,000	11.0	22,000	2,000	15.0	30,000
Prairie	1,200	11.7	14,000	.....	.....	.....
Richland	2,000	10.4	21,000	2,000	18.0	36,000
Wibaux	1,000	9.0	9,000	.....	.....	.....
SOUTHWESTERN—						
Beaverhead	600	21.7	13,000	.....	.....	.....
Madison	700	24.3	17,000	.....	.....	.....
Silver Bow	800	17.7	14,000	.....	.....	.....
SOUTH CENTRAL—						
Carbon	600	18.3	11,000	.....	.....	.....
Gallatin	1,000	18.5	19,000	.....	.....	.....
Park	600	18.3	11,000	.....	.....	.....
Stillwater	2,000	14.0	28,000	2,000	8.0	16,000
Sweet Grass	600	23.3	14,000	.....	.....	.....
Yellowstone	1,800	16.6	30,000	2,000	12.0	24,000
SOUTHEASTERN—						
Big Horn	1,000	15.0	15,000	1,000	10.0	10,000
Carter	2,800	11.5	32,000	2,000	12.0	24,000
Custer	1,500	12.0	18,000	1,000	10.0	10,000
Fallon	3,000	8.6	26,000	2,000	11.0	22,000
Powder River	1,000	13.0	13,000	1,000	11.0	11,000
Rosebud	2,000	8.5	17,000	2,000	15.0	30,000
Treasure	1,400	15.0	21,000	1,000	16.0	16,000
STATE TOTALS	156,000	11.0	1,716,000	125,000	14.0	1,750,000

Corn.

Corn acreage during the past five years has shown a remarkable expansion that has probably been encouraged during the three years preceding 1924 by favorable yields. Acreage of corn for all purposes in 1924 totalled 511,000 acres compared with 365,000 acres in 1923, but production in 1924 was slightly smaller than 1923, as a result of a very unfavorable season which reduced yields and cut the proportion of the crop that matured as grain. It would be unfortunate if last year's experience with the crop were to check the growth of the enterprise, for the crop has found a very useful place in rotation systems and has proven to be a good yielder of farm feed in average seasons.

Table XI.

CORN BY COUNTIES—1923 and 1924.

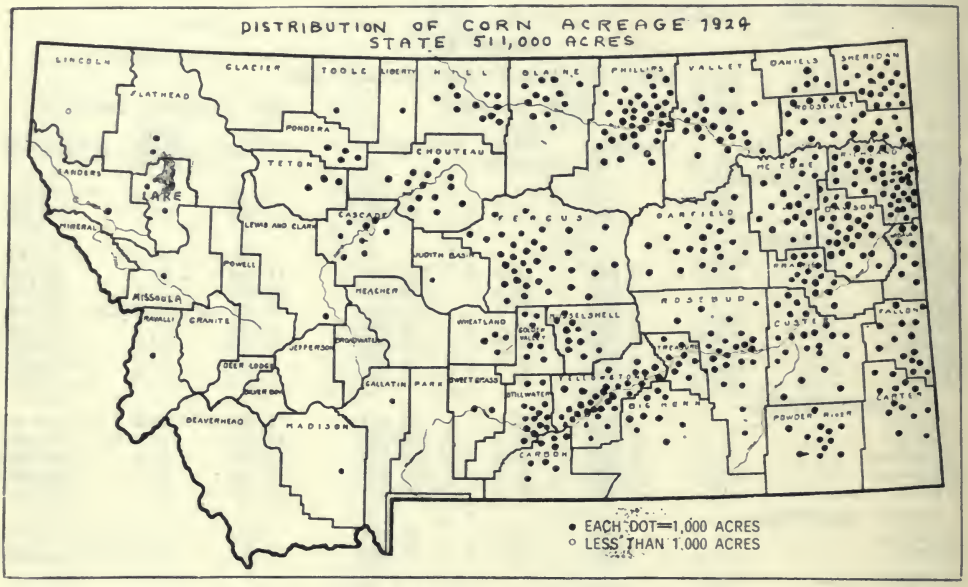
District and County:	1923 Revised. Acreage	1923 Revised. Acre Yield (bushel)	1923 Revised. Production	1924 December Estimate. Acreage	1924 December Estimate. Acre Yield (bushel)	1924 December Estimate. Production
NORTHWESTERN—						
Flathead	1,00	27.0	32,000	2,000	16.0	32,000
Sanders	500	26.0	13,000	1,200	18.0	22,000
NORTH CENTRAL—						
Lake	.....	.....	.....	700	20.0	14,000
Blaine	8,000	26.0	208,000	11,000	19.0	209,000
Chouteau	11,500	26.0	299,000	13,000	17.0	221,000
Hill	7,000	23.0	161,000	10,000	18.0	180,000
Liberty	1,400	20.0	28,000	2,800	15.0	42,000
Pondera	2,000	21.0	42,000	3,000	18.0	54,000
Teton	2,000	25.0	50,000	3,000	18.0	54,000
Toole	1,200	23.0	27,000	2,500	16.0	40,000
NORTHEASTERN—						
Daniels	3,300	25.0	82,000	5,000	18.0	90,000
Phillips	30,000	26.0	780,000	43,000	18.0	774,000
Roosevelt	13,000	25.3	330,000	20,000	20.0	400,000
Sheridan	12,000	25.0	300,000	18,000	20.0	360,000
Valley	15,000	26.0	390,000	22,000	19.0	418,000
WEST CENTRAL—						
Missoula	500	26.0	13,000	400	20.0	8,000
Ravalli	400	30.0	12,000	600	20.0	12,000
CENTRAL—						
Cascade	6,000	27.0	162,000	10,000	19.0	190,000
Fergus	25,000	27.2	680,000	33,000	19.0	626,000
Golden Valley	9,000	23.0	207,000	10,000	18.0	180,000
Judith Basin	2,200	22.2	49,000	2,700	17.0	46,000
Lewis and Cark	600	24.0	10,000	1,000	17.0	17,000
Musseshell	10,000	23.0	230,000	11,500	18.0	207,000
Wheatland	3,000	23.0	69,000	4,000	18.0	72,000
EAST CENTRAL—						
Dawson	16,000	28.1	450,000	26,000	18.0	468,000
Garfield	14,000	26.5	371,000	18,000	18.0	324,000
McCone	13,000	27.3	355,000	18,000	18.0	324,000
Prairie	11,000	28.0	308,000	14,000	17.0	238,000
Richland	25,000	28.2	704,000	41,000	17.0	697,000
Wibaux	6,500	26.5	172,000	9,000	17.0	153,000
SOUTHWESTERN—						
Madison	400	20.0	8,000	1,000	17.0	17,000
SOUTH CENTRAL—						
Carbon	5,000	30.0	150,000	7,000	20.0	140,000
Gallatin	500	28.0	14,000	1,000	18.0	18,000
Stillwater	7,000	26.0	182,000	12,000	17.0	204,000
Sweet Grass	800	25.0	20,000	1,600	16.4	26,000
Yellowstone	25,000	27.0	674,000	31,000	18.0	558,000
SOUTHEASTERN—						
Big Horn	7,000	24.0	168,000	10,000	17.0	170,000
Carter	10,000	27.0	270,000	13,000	17.0	221,000
Custer	14,000	25.0	350,000	20,000	18.0	360,000
Fallon	11,000	25.0	275,000	15,000	18.0	270,000
Powder River	9,000	27.0	243,000	12,000	18.0	216,000
Rosebud	18,000	24.0	432,000	22,000	17.0	374,000
Treasure	6,000	25.0	150,000	8,000	17.0	136,000
Other Counties	1,000	20.0	20,000	1,000	16.0	16,000
STATE TOTALS	365,000	26.0	9,490,000	511,000	18.0	9,198,000

USES OF CORN CROP 1923 AND 1924.

	1923 Acres	Acre Yield	1923 Production	1924 Acres	Acre Yield	1924 Production
For Grain	193,000	26.0	5,018,000	189,000	18.0	3,402,000
For Silage*	7,000	*5.0	*35,000	22,000	*3.5	*77,000
For Forage*	165,000	*2.1	346,000	329,000	*2.0	*658,000
ALL CORN	365,000	26.0	9,490,000	511,000	18.0	9,198,000

*Silage and Forage yields and production in tons.

Figure XI.



Potatoes.

Dissatisfaction with potato prices since 1920 has resulted, on the whole, in a shrinkage in acreage devoted to that crop. However, in 1924 there was a slight increase in acres planted compared with 1923. Production in 1924, on the other hand, was lowered from that of 1923 by unfavorable weather which cuts yield sharply, especially in the Ravalli and Flathead districts. The cut in commercial production was greater than for the total crop, carlot movement of potatoes during the fall of 1924 falling almost to a third of that for the same period a year ago. Better local prices, however, have prevailed in 1924 than in 1923.

The unfavorable factors that reduced yields were principally a poor start and later dry weather. The end of season weather was mostly favorable and a better quality resulted than in 1923. Per cent of the crop that graded U. S. No. 1 in 1924 was 60 compared with 50 for the 1923 crop and 55 per cent in 1922. Estimated distribution of the 1924 production is as follows:

	Bushels	Bushels
Total Crop	3,256,000	
Unfit for Use		293,000
Saved for Food Where Grown		680,000
Saved for Seed Where Grown		442,000
Available for Sale Local and Outside		1,841,000
Equaling Total Crop or		3,256,000

Table XII.

POTATOES BY COUNTIES—1923 and 1924.

District and County:	1923 Revised. Acreage	1923 Revised. Acre Yield (bushel)	1923 Revised. Production	1924 December Estimate. Acreage	1924 December Estimate. Acre Yield (bushel)	1924 December Estimate. Production
NORTHWESTERN—						
Flathead	2,500	100	250,000	4,000	77	308,000
Lincoln	700	90	63,000	700	85	60,000
Lake	1,000	100	100,000	1,700	77	130,000
Sanders	800	100	80,000	700	82	57,000
NORTH CENTRAL—						
Blaine	600	120	72,000	800	135	108,000
Chouteau	500	90	45,000	500	78	39,000
Glacier	200	100	20,000	200	50	10,000
Hill	400	90	36,000	400	70	28,000
Liberty	100	100	10,000	100	72	7,000
Pondera	500	130	65,000	500	89	44,000
Teton	500	120	60,000	600	59	35,000
Toole	150	80	12,000	200	92	18,000
NORTHEASTERN—						
Daniels	300	90	27,000	200	115	23,000
Phillips	600	92	55,000	500	106	53,000
Roosevelt	550	69	38,000	500	107	53,000
Sheridan	800	70	56,000	700	110	77,000
Valley	700	74	52,000	800	110	88,000
WEST CENTRAL—						
Deer Lodge	900	138	124,000	700	90	63,000
Granite	300	133	40,000	300	100	30,000
Mineral	150	120	18,000	200	100	20,000
Missoula	1,100	90	99,000	1,000	105	105,000
Powell	1,100	110	121,000	1,000	64	64,000
Ravalli	2,100	140	294,000	1,800	110	198,000
CENTRAL—						
Broadwater	450	145	65,000	400	73	29,000
Cascade	900	114	103,000	800	98	78,000
Fergus	1,400	121	169,000	2,000	68	136,000
Golden Valley	300	107	32,000	300	58	17,000
Jefferson	1,000	145	145,000	800	101	81,000
Judith Basin	500	110	55,000	500	39	19,000
Lewis and Clark	1,400	124	174,000	1,300	107	139,000
Meagher	250	100	25,000	200	60	12,000
Musselshell	300	83	25,000	300	52	16,000
Wheatland	350	100	35,000	300	45	14,000
EAST CENTRAL—						
Dawson	500	72	43,000	500	80	40,000
Garfield	600	79	47,000	600	63	38,000
McCone	600	75	45,000	600	76	46,000
Prairie	300	73	22,000	400	70	28,000
Richland	1,000	85	85,000	900	93	84,000
Wibaux	400	75	30,000	400	90	36,000
SOUTHWESTERN—						
Beaverhead	500	146	73,000	400	117	47,000
Madison	1,200	155	186,000	1,400	110	154,000
Silver Bow	200	100	20,000	.....	.....	.....
SOUTH CENTRAL—						
Carbon	1,150	130	150,000	1,000	105	105,000
Gallatin	800	144	115,000	700	106	74,000
Park	450	178	80,000	400	110	44,000
Stillwater	450	122	55,000	400	109	44,000
Sweet Grass	350	150	52,000	400	116	46,000
Yellowstone	1,300	134	174,000	1,300	93	121,000
SOUTHEASTERN—						
Big Horn	350	109	38,000	400	65	26,000
Carter	250	76	19,000	200	68	14,000
Custer	600	67	40,000	500	68	34,000
Fallon	500	56	28,000	500	83	42,000
Powder River	250	72	18,000	200	73	15,000
Rosebud	500	94	47,000	500	71	36,000
Treasure	250	112	28,000	300	75	23,000
STATE TOTALS	36,000	110	3,960,000	37,000	88	3,256,000

Hay.

Total hay production in 1924 was 2,848,000 tons compared with 2,756,000 in 1923, the increase coming in tame hay and more than offsetting a slight reduction in the wild hay crop. Tame hay production is about four times larger than that of wild hay and is made up largely of alfalfa and grains cut green. The 1924 season was quite favorable for hay crops over most of the eastern two-thirds of the state, but crops were severely curtailed by dry weather in many localities in the western third. Tame hay acreage and yield by varieties from 1920 to 1924 is shown in the the table following.

Table XIII.

TAME HAY BY VARIETIES—1920-1924.

Variety:	Acreage	Yield per Acre	Production
Alfalfa Hay:			
1924	614,000	2.01	1,234,000
1923	536,000	2.15	1,152,000
1922	486,000	2.20	1,069,000
1921	466,000	2.25	1,048,000
1920	424,000	2.15	912,000
Timothy Hay:			
1924	70,000	1.40	98,000
1923	87,000	1.63	142,000
1922	83,000	1.50	124,000
1921	81,000	1.40	114,000
1920	90,000	1.50	135,000
Mixed Clover and Timothy Hay:			
1924	106,000	1.61	171,000
1923	165,000	2.00	330,000
1922	150,000	1.90	285,000
1921	154,000	1.70	262,000
1920	140,000	1.80	252,000
Grain Cut Green for Hay:			
1924	288,000	1.40	403,000
1923	208,000	1.37	285,000
1922	195,000	1.40	273,000
1921	202,000	1.20	242,000
1920	313,000	1.15	360,000
Clover Hay:			
1924	82,000	1.55	127,000
1923	55,000	1.80	99,000
1922	45,000	1.80	81,000
1921	44,000	1.60	70,000
1920	42,000	1.60	67,000
Millet and Miscellaneous Tame Hay:			
1924	163,000	1.34	227,000
1923	99,000	1.55	154,000
1922	86,000	1.64	141,000
1921	98,000	1.37	134,000
1920	96,000	1.44	138,000

Figure XII.

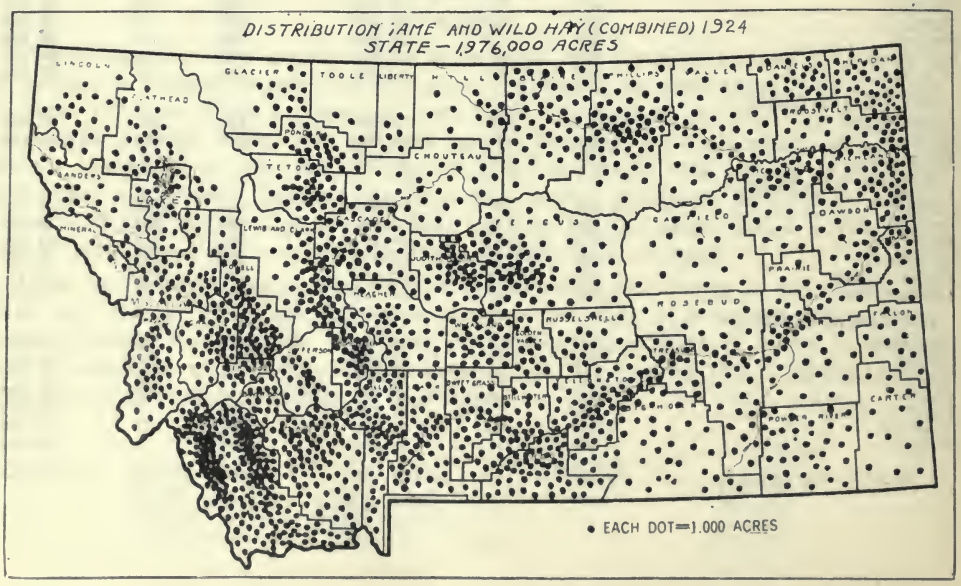


Table XIV.

TAME HAY BY COUNTIES—1923 and 1924.

District and County:	1923 Revised Acreage	1923 Revised Acre Yield	1923 Revised Production	1924 December Estimate Acreage	1924 December Estimate Acre Yield	1924 December Estimate Production
		Tons	Tons		Tons	Tons
NORTHWESTERN—						
Flathead	20,000	1.5	30,000	16,000	1.4	22,400
Lincoln	11,000	1.6	17,600	14,000	1.6	22,400
Lake	14,000	1.4	19,600	16,000	1.5	23,900
Sanders	15,000	2.0	30,000	18,000	1.5	27,000
NORTH CENTRAL—						
Blaine	21,000	1.7	35,700	22,000	2.2	48,400
Chouteau	14,000	1.4	19,600	17,000	1.8	30,600
Glacier	1,000	1.6	1,600	2,000	1.5	3,000
Hill	7,000	1.4	9,800	9,000	1.6	14,400
Liberty	2,000	1.2	2,400	3,000	2.0	6,000
Pondera	16,000	1.7	27,200	20,000	1.9	38,000
Teton	8,000	1.7	13,600	12,000	1.3	15,600
Toole	2,000	1.2	2,400	2,000	1.2	2,400
NORTHEASTERN—						
Daniels	13,000	1.5	19,500	18,000	1.6	28,800
Phillips	23,000	1.2	27,600	27,000	1.5	40,500
Roosevelt	10,000	1.4	14,000	14,000	1.8	25,200
Sheridan	16,000	1.5	24,000	21,000	1.4	29,400
Valley	18,000	1.6	28,800	22,000	1.8	39,600
WEST CENTRAL—						
Deer Lodge	8,000	1.8	14,400	9,000	1.6	14,400
Granite	32,000	2.0	64,000	36,000	1.5	54,000
Mineral	2,000	2.2	4,400	3,000	1.6	4,800
Missoula	41,000	2.5	102,500	46,000	1.4	64,400
Powell	40,000	1.7	68,000	45,000	1.5	67,500
Ravalli	38,000	2.1	79,800	43,000	2.1	90,300
CENTRAL—						
Broadwater	23,000	2.4	55,200	27,000	2.0	54,000
Cascade	41,000	2.0	82,000	44,000	1.6	70,400
Fergus	54,000	2.1	113,400	61,000	1.5	91,500
Golden Valley	9,000	1.9	17,100	10,000	1.5	15,000
Jefferson	15,000	2.0	30,000	17,000	1.5	25,500
Judith Basin	21,000	1.9	39,900	30,000	1.6	48,000
Lewis and Clark	34,000	2.0	57,800	38,000	1.7	54,600
Meagher	17,000	1.6	27,200	20,000	1.6	32,000
Musselshell	12,000	1.4	16,400	15,000	1.5	22,500
Wheatland	18,000	1.5	27,000	21,000	1.4	29,400
EAST CENTRAL—						
Dawson	10,000	1.1	11,000	11,000	1.2	13,200
Garfield	16,000	1.3	20,800	18,000	1.2	21,600
McCone	18,000	1.3	23,400	24,000	1.6	38,400
Prairie	5,000	1.3	6,500	7,000	1.8	12,600
Richland	24,000	1.6	38,400	27,000	1.8	48,600
Wibaux	6,000	1.3	8,000	8,000	1.3	10,400
SOUTHWESTERN—						
Beaverhead	48,000	2.4	115,200	51,000	1.5	76,500
Madison	56,000	2.4	134,400	60,000	2.1	126,000
Silver Bow	8,000	1.8	14,400	10,000	1.5	15,000
SOUTH CENTRAL—						
Carbon	44,000	2.7	118,800	49,000	2.4	117,600
Gallatin	53,000	2.4	127,200	58,000	2.0	116,000
Park	41,000	2.0	82,000	47,000	2.1	98,700
Stillwater	24,000	1.5	36,000	27,000	2.1	56,700
Sweet Grass	23,000	2.0	46,000	26,000	2.0	52,000
Yellowstone	46,000	2.0	92,000	50,000	2.0	100,000
SOUTHEASTERN—						
Big Horn	24,000	1.9	45,600	27,000	1.5	40,500
Carter	5,000	1.2	6,000	6,000	1.3	7,800
Custer	21,000	1.2	25,200	24,000	1.2	28,800
Fallon	5,000	1.4	7,000	6,000	2.3	13,000
Powder River	21,000	1.4	29,400	24,000	1.4	33,600
Rosebud	27,000	1.3	35,100	33,000	1.5	49,500
Treasure	9,000	1.9	17,100	12,000	1.4	16,800
TOTAL FOR STATE	1,150,000	1.88	2,162,000	1,323,000	1.77	2,260,000

Apples.

A heavy June freeze in the important Bitter Root producing district was principally the reason for the drastic cut in apple production in 1924 compared with 1923. Total Crop in 1924 was placed at 574,000 bushels compared with 980,000 in 1923, while the commercial crop was placed at 70,000 barrels compared with the 1923 estimate of 130,000. Carlot shipments from the 1924 crop to January 31, 1925, were but 142 cars compared with a movement of 420 cars to February 2, a year ago. The amount of fancy and high grade apples in 1924 was relatively less than the preceding year.

MONTANA COMMERCIAL APPLE PRODUCTION.

Crop Year:	Total Crop Bushels	Commercial Crop (Barrels)	Cars Shipped of This Crop
1924	574,000	70,000	*
1923	970,000	130,000	451
1922	610,000	115,000	351
1921	975,000	175,000	687

*Shipping season from Aug. 20th to May 31. Up to Jan. 31, 1925—142 cars had moved, indicating on basis of percentage usually shipped by this date that only about 8 to 10 cars remain to be shipped.

Other Fruits and Miscellaneous Products.

Pears, plums and prunes are also grown in varying small quantities west of the Continental Divide, but the principal commercial fruit crop other than apples is cherries. The large sweet cherries of the Flathead region and the canning cherries of the Bitter Root valley are increasing as additional sources of farm income in those sections. There is also a small amount of berry fruits produced here, chief among which are strawberries. In southeastern Montana, watermelons are grown in small commercial quantities in recent years, principally in Rosebud county.

Beans.

Bean production has shown a large expansion in recent years with the introduction of the Great Northern variety which in 1924 is estimated to have comprised about 95 per cent of the total crop. Yellowstone, Carbon, Big Horn, and Stillwater counties have the bulk of the bean acreage, but many other localities have come into production in the past two years. Beans are grown on both irrigated and dry lands, and average yields have been relatively good.

Canning and Seed Peas.

Seed peas grown on contract, mostly in irrigated valleys in the south-central, central, southwestern and western districts, have been a growing contributor to farm income in these sections in recent years. Peas for canning are grown in Ravalli and Gallatin counties. Both crops were fair producers this year.

Sugar Beets.

Continued expansion in the acreage of sugar beets and new localities growing the crop, marked the 1924 season compared with 1923. Farm income from beet production in 1924 was estimated at $3,969,000 compared with $2,725,000 in 1923. Yellowstone, Carbon, Stillwater, Big Horn, Treasure and Richland counties are the principal producing areas. In the Billings district winter feeding of cattle and sheep with beet pulp as the basis of the fattening ration has been developing on a considerable scale with the beet sugar industry.

Alfalfa Seed.

Southeastern Montana has long been a commercial producer of high grade alfalfa seed. Other sections of the state also grow seed in varying surplus quantities. Garfield, Big Horn, Rosebud, and Powder River counties are the principal producers in southeastern Montana. A small production is also found in the northern counties along the Milk river and in localities west of the Continental Divide. Yields and prices during the past two years have been relatively favorable.

Miscellaneous Crops.

Sweet clover seed, timothy seed, sunflowers for silage, cucumber seed, vegetable and truck crops also feature in Montana farming, and not a few farmers secure a part of their cash income from these sources.

MONTANA'S RANK WITH OTHER STATES IN CROP PRODUCTION.

CROP:	Rank 1924	CROP:	Rank 1924
Spring Wheat	2	Potatoes	33
Winter Wheat	19	Apples (commercial)	40
All Wheat	5	Corn	31
Oats	16	Hay (tame)	15
Barley	15	Hay (wild)	6
Flax	4	Beans	7
Rye	10	All Crops	28

AVERAGE WAGES OF MALE FARM LABOR IN MONTANA.

Years	Per Month.		Per Day at Harvest		Per Day Other Than Harvest.	
	With Board	Without Board	With Board	Without Board	With Board	Without Board
1910	$38.00	$50.00	$2.05	$2.80	$1.77	$2.66
1922	42.20	63.00	3.60	4.40	2.40	3.20
1923	48.00	65.50	3.60	4.52	2.70	3.55
1924	48.00	67.00	3.25	4.30	2.60	3.40

AVERAGE ASSESSED VALUATION OF MONTANA LANDS.

YEAR:	Irrigated Lands	Non-Irrigated Agricultural Lands	Grazing Lands
1924	$52.37	$13.97	$5.39
1923	51.15	13.47	6.08
1922	51.38	12.65	6.51

AVERAGE VALUE OF PLOW LANDS PER ACRE.

March:	Poor Plow Land			Good Plow Land			All Plowed Land		
	Montana	Iowa	United States	Montana	Iowa	United States	Montana	Iowa	United States
1924	$13	$107	$43	$30	$169	$82	$21	$143	$64+
1923	14	115	45	31	181	85	22	153	67
1919	21	129	51	45	196	92	24	169	74

SEASONAL WEATHER SUMMARY, APRIL 1 TO SEPTEMBER, INCL., 1924.

(By W. T. Lathrop, Meteorologist, U. S. Weather Bureau.)

Viewing it broadly the season was a dry one. For convenience in handling the Montana weather data the regular and co-operative stations of the Weather Bureau are ordinarily placed in three groups, designated respectively as West of the Divide; Central Division, extending from the Continental Divide near to longitude 109°; and Eastern Division, extending thence to the Dakotas, taking in, however, all of Carbon County. In only one month during the season did any one of these divisions have a general average of rainfall as great as the normal. This was in June, when the eastern division averaged more than half an inch above normal. Yet the seasonal precipitation for a large area in the northeast was above normal, and two small areas, one in Glacier County, owing to heavy June and August rains, and one in northern Carter County, owing to heavy June rains, likewise were above normal in their totals for the season.

The greatest amount recorded in the state, for the season, was at a station nine miles north of Babb, Glacier County, 16.55 inches. The least was 1.91, at Brenner, Beaverhead County.

The geographical distribution of precipitation for the season is too irregular to depict verbally with any considerable degree of satisfaction. The totals were especially low west of the Divide, where the Bitter Root valley and the vicinity of Libby received totals of less than 4.00 inches. Western Beaverhead County also had less than 4.00 inches. The Yellowstone valley, between Big Timber and Miles City, varied from a little more than 4.50 inches to about 7.00 inches. Portions of Hill, Liberty, and Toole counties received less than 7.00 inches. The principal region over which 10.00 inches or more of precipitation was recorded extends from western Dawson County northwestward into Canada, and westward over Garfield, northern Fergus, Phillips, northern Blaine, and eastern Hill counties. Smaller areas with more than 10.00 inches are found in Glacier County, parts of Chouteau and Cascade, Wibaux, and Carter counties, and small areas centering at Bozeman and Red Lodge.

The state precipitation was below normal for April the first time in five years. The May precipitation was the lightest ever recorded in May; in this month every station in the state had less than normal rainfall. In June the excess in the east end carried the state average above normal. Rains which became general about the close of the first week of June ended drought in various sections. Heavy snow fell in the northwest, Columbia Falls reporting 14 inches, and ice appeared in western and central parts of the state. The benefits from the precipitation outweighed the ill effects of low and freezing temperatures upon fruit, vegetables, and alfalfa, but the losses sustained by some farmers were severe. July rains were the lightest in five years for that month, and August in three, while lighter September precipitation has been recorded only four times in thirty years.

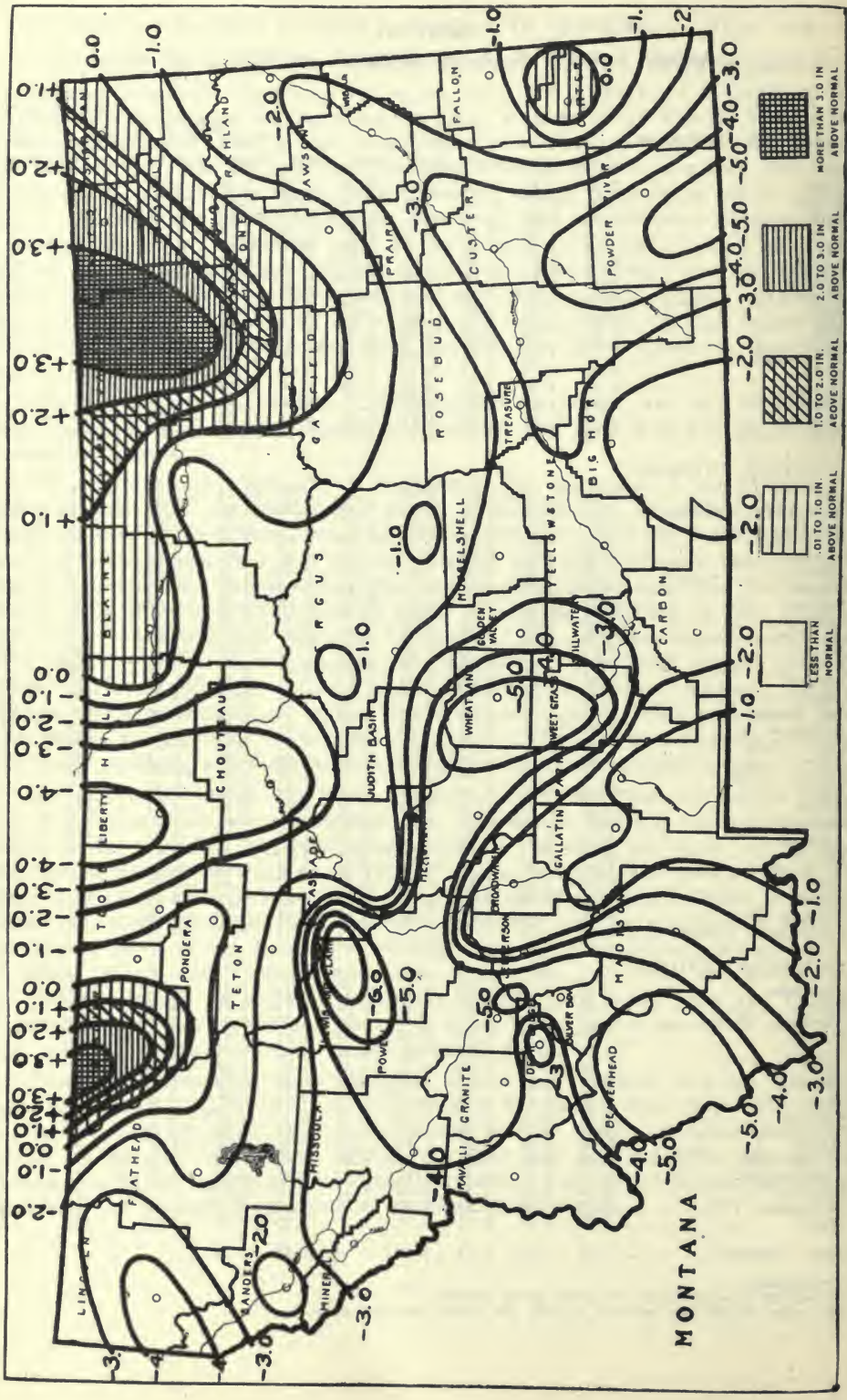
Temperatures generally were moderate and no new records were set, notwithstanding the cold snap in June. It was, however, the coolest June since 1917. Only one month, May, averaged higher than normal for the state. In April, June, and August all divisions were below normal In May, July and September the eastern division was below normal and the other two above. The highest temperature registered was 110° at Roy, Fergus County, on the 27th of August.

Figure XV.

PRECIPITATION DURING GROWING SEASON 1924 (Inches and Hundreths).

	April	May	June	July	Aug.	Sept.	Total Seas.	Departure from Normal	Length of Growing Season: Days 1924	Length of Growing Season: Days Average‡
EASTERN DIVISION—										
Biddle	1.20	0.62	1.70	2.73	0.13	0.51	6.89	—5.17	96	118
Billings	0.59	2.05	1.74	1.96	0.12	0.48	6.94	—2.79	97	133
Circle	0.83	0.96	4.84	1.17	5.04	0.36	13.20	—0.19	96	111
Crow Agency	0.64	1.95	3.18	2.25	0.00	0.52	8.54	—1.32	132	135
Culbertson	1.03	1.16	3.52	1.59	1.23	0.53	9.06	—1.32	119	.....
Ekalaka	1.22	0.81	6.20	1.44	0.65	0.36	10.68	+0.36	109	120
Glasgow	1.09	1.90	4.84	1.01	3.10	0.46	12.40	+3.22	114	119
Glendive	1.44	0.85	4.34	1.42	0.51	0.17	8.73	—2.22	144	131
Malta	0.64	1.38	4.62	1.08	1.21	1.10	10.03	—1.15	109	127
Miles City	1.31	0.34	1.72	0.39	0.66	0.15	4.57	—3.78	144	151
Plevna	1.61	0.47	3.31	1.75	0.83	0.81	8.78	—1.71	124	126
Red Lodge	1.52	1.93	3.09	1.97	1.10	1.47	11.08	—2.42	103	88
Savage	1.30	0.70	3.97	2.41	1.24	0.25	9.87	—2.25	126	119
Snowbelt	0.92	1.93	4.85	0.62	1.91	0.44	10.67	.....	132	140
Valentine	0.68	1.28	3.65	0.77	1.15	0.66	8.19	—1.49	116	118
Wheaton	1.26	1.94	2.99	1.11	1.11	0.24	8.65	—1.99	†	97
White Water	0.68	1.65	5.86	1.80	1.49	1.14	12.62	+1.77	100	108
CENTRAL DIVISION—										
Adel	2.17	2.63	3.68	1.47	1.45	2.44	13.84	—1.40	64	86
Agr'cultural College	2.82	1.90	1.46	1.95	0.20	2.89	11.22	—1.29	112	113
Augusta	0.68	0.33	2.11	1.08	0.51	0.62	5.33	—6.82	85	92
Big Timber	0.70	0.87	0.25	1.90	0.30	0.67	4.69	—5.54	107	114
Brenner	0.30	0.11	0.21	0.41	0.06	0.82	1.91	—5.00	†	89
Browning	0.25	0.44	6.35	1.01	3.10	0.42	11.57	+2.29	101	77
Cascade	0.59	0.76	2.87	0.71	1.19	0.97	7.09	—6.37	84	121
Chinook	1.21	1.02	5.16	1.23	0.58	1.12	10.32	+0.69	129	127
Choteau	0.48	0.30	2.21	0.88	0.71	1.22	5.80	.....	86	112
Cut Bank	0.61	0.26	6.41	0.58	1.89	0.68	10.43	—0.50	123	115
Denton	0.71	1.48	4.90	0.53	0.98	1.48	10.08	—0.71	134	129
Dillon	0.62	0.53	1.28	1.98	0.51	1.85	6.77	—5.19	114	96
Dunkirk	0.53	0.32	3.19	0.47	1.92	0.80	7.23	—1.59	67	121
Findon	1.43	0.82	1.77	1.31	0.95	1.54	7.82	—5.30	134	113
Fort Shaw	0.15	0.55	1.91	1.09	0.74	0.75	5.19	—2.66	86	122
Geraldine	0.88	0.93	3.27	0.50	1.25	1.91	8.74	—4.05	139	140
Great Falls	0.78	1.07	4.12	0.93	0.53	2.37	9.80	—1.20	149	139
Havre	1.00	0.78	5.76	0.70	1.39	0.64	10.27	+0.14	132	126
Hebgen Dam	0.91	1.00	1.00	3.22	0.91	2.78	9.82	—0.17	95	43
Helena	0.50	0.87	1.14	0.89	0.25	1.15	4.80	—1.22	164	142
Holter	0.65	1.37	1.57	0.51	1.02	0.87	5.99	—4.51	149	121
Kinread	0.36	0.19	3.20	0.61	2.26	0.42	7.04	.....	100	.....
Livingston	1.89	1.18	1.35	3.16	0.43	1.76	9.77	—0.24	132	124
Renova	0.88	0.54	0.64	0.87	0.28	1.23	4.44	—4.54	112	106
Three Forks	1.65	0.70	1.24	1.19	0.08	1.96	6.82	—0.45	.....	100
Utica	0.88	1.46	2.65	1.23	0.69	1.47	8.38	—3.68	122	115
Valier	0.56	0.30	4.68	0.61	2.39	0.57	9.11	—0.57	118	130
Virginia City	0.90	0.63	0.72	1.56	0.45	2.13	6.39	—3.30	93	109
White Sulp. Sprgs.	0.56	1.00	1.20	0.95	T.	0.80	4.51	—4.13	95	94
WEST OF DIVIDE—										
Anaconda	1.44	0.54	0.82	2.06	0.27	1.24	6.37	—2.59	105	93
Butte	0.39	0.66	0.70	1.37	0.25	0.71	4.08	—4.80	95	112
Columbia Falls	0.46	0.53	5.28	0.59	1.36	1.29	9.51	—2.37	97	83
Eureka	0.04*	0.37	2.40	0.89	1.03	1.11	5.84	.....	143	.....
Haugan	1.11	0.11	1.52	0.81	1.08	1.22	5.85	—2.57	†	73
Heron	1.17	0.21	1.52	0.85	1.03	1.17	5.95	—4.72	†	97
Kalispell	0.01	0.39	3.24	0.97	0.74	0.90	6.25	—1.64	103	154
Libby	0.30	0.40	1.23	0.31	1.20	0.54	3.98	—4.49	82	93
Missoula	0.28	0.77	1.24	0.58	0.75	0.51	4.13	—4.49	135	119
Philipsburg	0.53	1.27	1.53	1.82	0.57	0.51	6.23	—4.29	84	74
Plains	0.30	0.34	1.86	0.43	1.26	0.31	4.50	—3.22	96	.....
St. Ignatius	0.95	0.87	2.90	0.90	1.03	0.60	7.25	—3.13	110	121
Stevensville	0.32	0.35	1.15	1.01	0.32	0.65	3.80	—3.73	92	122
Superior	0.73	0.30	1.86	0.85	1.52	0.57	5.83	.....	98	92
Thompson Falls	0.90	0.28	1.98	0.82	1.78	0.82	6.58	—1.48	121	125
Victor	0.67	0.37	0.51	1.01	0.25	0.81	3.62	—3.63	124	114
State Average	0.79	0.84	2.73	1.12	1.00	0.87	7.35			

*Incomplete.
†Freezing temperature recorded each month.
‡Average Based on records mostly 10 years old and over.



TOTAL DEPARTURE FROM NORMAL PRECIPITATION, APRIL TO SEPTEMBER, INCL., 1924

Montana Livestock

Inventory Changes During 1924.

Total numbers as estimated on January 1, 1925, compared with a year ago show a gain of 53,000 head for all cattle, a gain of 66,000 head for all sheep, a loss of 8,000 head for all horses, and practically the same numbers as a year ago for all hogs and mules. Total value as of date January 1, 1925, of all livestock on farms and ranges aggregated $93,942,000, a gain of about five and a half million dollars.

Table XVI.

ANNUAL LIVESTOCK ESTIMATE FOR MONTANA JANUARY, 1925.
(Estimates for three years previous for comparison.)

Montana Livestock on farms and ranges, 1925-24-23-22:	Total Number.	Average Value per Head.	Total Value.
HORSES:			
Jan. 1, 1925	593,000	$30.00	$17,790,000
Jan. 1, 1924	611,000	31.00	18,941,000
Jan. 1, 1923	643,000	38.00	24,434,000
Jan. 1, 1922	670,000	41.00	27,470,000
MULES:			
Jan. 1, 1925	9,000	50.00	450,000
Jan. 1, 1924	9,000	55.00	495,000
Jan. 1, 1923	9,000	60.00	540,000
Jan. 1, 1922	9,000	69.00	621,000
MILK COWS:			
Jan. 1, 1925	220,000	50.00	11,000,000
Jan. 1, 1924	204,000	53.00	10,812,000
Jan. 1, 1923	173,000	55.00	9,515,000
Jan. 1, 1922	160,000	58.00	9,280,000
OTHER CATTLE:			
Jan. 1, 1925	1,285,000	27.10	34,824,000
Jan. 1, 1924	1,248,000	27.60	34,445,000
Jan. 1, 1923	1,273,000	30.90	39,336,000
Jan. 1, 1922	1,260,000	27.20	34,272,000
ALL CATTLE:			
Jan. 1, 1925	1,505,000	30.45	45,824,000
Jan. 1 1924	1,452,000	31.17	45,257,000
Jan. 1, 1923	1,446,000	33.78	48,851,000
Jan. 1, 1922	1,420,000	30.60	43,552,000
SHEEP:			
Jan. 1, 1925	2,536,000	10.40	26,374,000
Jan. 1, 1924	2,370,000	8.70	20,619,000
Jan. 1, 1923	2,270,000	8.70	19,749,000
Jan. 1, 1922	2,270,000	4.70	10,669,000
SWINE:			
Jan. 1, 1925	292,000	12.00	3,504,000
Jan. 1, 1924	292,000	11.00	3,270,000
Jan. 1, 1923	225,000	13.20	2,970,000
Jan. 1, 1922	180,000	13.10	2,358,000

VALUES OF ABOVE CLASSES OF LIVESTOCK IN MONTANA.

January 1, 1925	$93,942,000
January 1, 1924	88,582,000
January 1, 1923	96,544,000
January 1, 1922	84,671,000

LIVESTOCK ON FARMS AND RANGES IN UNITED STATES JAN. 1, 1925 and 1924.

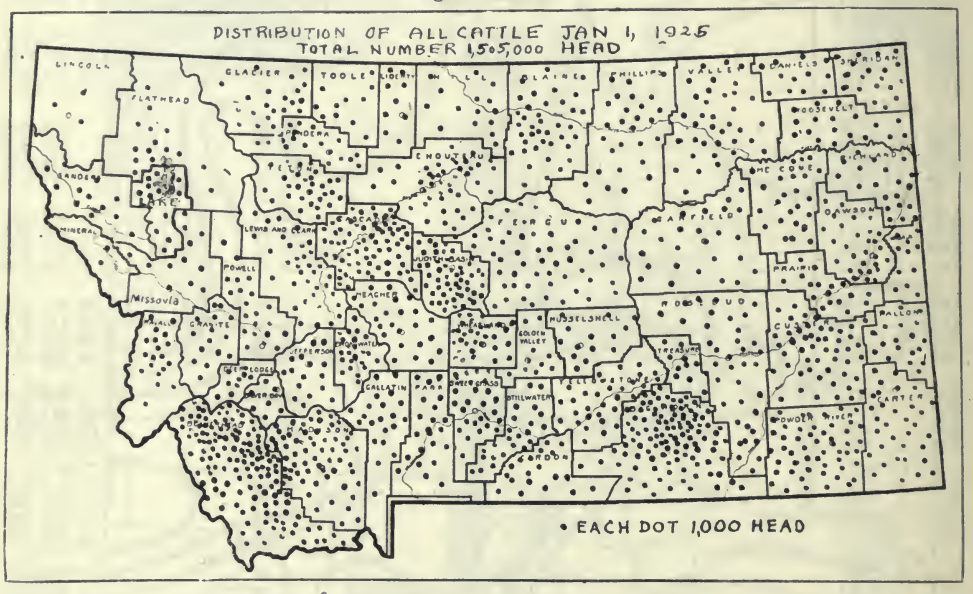
CLASS:	Year.	Numbers.	Av. Value per Head.	Total Value.
HORSES:	1925	17,589,000	$62.95	$1,107,248,000
	1924	18,059,000	64.45	1,163,914,000
MULES:	1925	5,411,000	80.60	436,122,000
	1924	5,446,000	84.18	458,463,000
MILK COWS:	1925	25,319,000	50.50	1,278,714,000
	1924	24,786,000	52.16	1,292,736,000
OTHER CATTLE:	1925	39,609,000	24.49	970,117,000
	1924	41,720,000	25.08	1,045,523,000
SHEEP	1925	39,134,000	9.53	372,909,000
	1924	38,300,000	7.87	301,455,000
SWINE:	1925	54,234,000	12.34	669,402,000
	1924	66,130,000	9.75	644,496,000

TOTAL VALUE ABOVE CLASSES IN UNITED STATES JAN. 1, 1925.....$4,834,512,000
TOTAL VALUE ABOVE CLASSES IN UNITED STATES JAN. 1, 1924.....$4,906,587,000

Beef Cattle.

Continued disparity between market prices for beef and production costs and difficulties in financing beef-cattle production have resulted in another poor year for the industry. Stockmen specializing in beef cattle have faced this situation during the entire post-war period, during which they have seen the beef-cattle dollar fluctuate about a low point in purchasing power, such as would appear ultimately to mean certain elimination for many producers. On the other hand neither stockyard receipts, nor assessment data indicate any appreciable decrease in total numbers of cattle, and there is evidence of an increase in numbers of what may be termed farm cattle, as a consequence of the loss of market for feed crops in recent years, and the necessity on part of the grain farmer of increasing his livestock to utilize this surplus on the farm. This competition from the farmer has added to the difficulties of the range cattleman.

Figure XIV.



Some Favorable Aspects of the Beef Cattle Situation.

In the Agricultural Outlook, issued by the U. S. Department of Agriculture in February (1925), prospects for the beef cattle industry were characterized as being moderately favorable with the promise of 1925 prices averaging somewhat higher than for 1924. Among aspects that were considered favorable were the following:

(1) The trend toward smaller numbers. Cattle other than milk cows in twelve range states on January 1, 1925 declined 4.6 per cent from the preceding year and were 7.9 per cent below 1922 indicating a downward trend in range cattle production.

(2) Cattle on feed in the corn belt states on January 1, 1925, were 18 per cent less than on January 1, 1924, with marketings and slaughter in December (1924) the largest since 1919. This is a tangible promise of reduced competition in range cattle markets from well finished cattle next summer and fall.

(3) The relation of beef to competing commodities especially pork is more favorable than a year ago (1924). In other words a tendency toward higher pork prices will check substitution of pork for beef if not tend to reverse this competition. Promise of improved industrial conditions in 1925 is also favorable for somewhat larger consumption of beef.

(4) With an improvement in the feed situation and in the prices for finished cattle, a fairly active demand for stockers and feeders is expected in the fall of 1925 and prices for such cattle should average a little higher than in the fall of 1924.

On the Other Hand.

On the other hand, the federal report points out that even at present price levels (January, 1925), American beef cannot compete with Argentine beef in the European markets, so there is no prospect of an improved export trade, although any probable increase in the price level is not expected to be great enough to attract Argentine beef to the United States. From another federal source it is pointed out that virtually all dairy cattle eventually are slaughtered in competition with beef and that expansion in the dairy industry is still in progress, January 1, numbers (1925) having been estimated (for all United States) at 24,600,000, compared with 23,400,000 in 1919 and 20,400,000 in 1913.

From a Montana Viewpoint.

The State Agricultural College has the following to say with relation to the beef cattle situation in Montana:

"While immediate prospects for the grower of beef cattle show only a slight improvement, it is generally expected that this improvement will continue for some years."

The college also calls attention to the fact that the spread between high grade stuff and inferior to common grades has been great and will probably continue, and that higher grade stock is what is demanded by the feeder buyer.

The development of finishing and fattening cattle in some sections of Montana, where surplus of feed grains, hay and concentrates can be utilized is already a factor for some improvement in the state's beef industry, as is also the trend toward earlier maturing types, which though hampered by lack of ability to finance on the part of many producers, is nevertheless making some headway.

Sheep.

Increased numbers of sheep on farms and ranges and a larger production of wool in 1924 compared with 1923 have been the response of Montana sheepmen to the trend of market prices of sheep and wool. The sheep industry is in its strongest position since war days, and after three years of improvement has now reached a point where most, if not all, of old indebtedness has been liquidated. Prices of breeding stock have reached the highest point since the war period and there is indirect evidence of a large number of sales. There was a tendency last fall to withhold ewe lambs in marketings, and present signs point to some further expansion in the sheep industry in 1925.

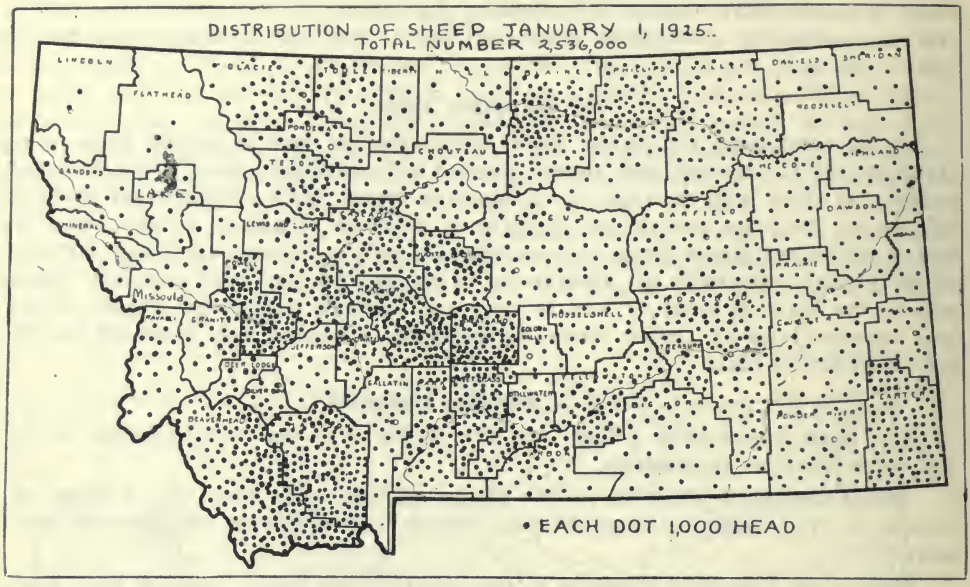
Hogs.

Expansion in the hog industry reached a peak in 1924, when marketings practically doubled those of the preceding year. January 1 numbers on farms (1925) were estimated as being practically the same as a year ago, while the December pig survey made by the U. S. Department of Agriculture, indicated a moderate reduction in numbers of sows bred for spring pigs (1925 crop).

Horses.

Horse raising as an industry has declined to a point where it is relatively unimportant. Total numbers of horses on farms and ranges have declined steadily in the past five years, and breeding at present is largely confined to that necessary to maintain farm numbers.

Figure XV.



Milk Cows and Dairying.

A further increase in numbers of milk cows on farms compared with a year ago was shown by the January 1 (1925) estimate, which placed this increase at 16,000 head. The increase in dairying in Montana in recent years has not come about so much in farms making milk production their principal operation, as it has in farms which have come to milk cows for additional cash income, and as part of a plan to diversify their program during recent years of low wheat prices.

MANUFACTURED DAIRY PRODUCTS.

(Source: Records of Dairy Division, Montana Department of Agriculture.)

YEAR:	Number Creameries Operating	Butter Made Pounds	Number Cheese Factories Operating	Cheese Made Pounds	Ice Cream Made Gallons
1921	53	7,464,679	5	158,559	481,160*
1922	57	7,815,847	5	188,889	355,041*
1923	67	10,721,595	6	250,000	711,762

*Incomplete.
**Partly Estimated.

Poultry and Poultry Products.

Income from poultry and poultry products in 1924 was about the same as in 1923. The following table shows the growth of the poultry industry since 1919.

YEAR:	Number Chickens Raised.	Dozens of Eggs Produced.	Receipts from Sales of Chickens and Eggs.
1919	3,247,090	11,858,042	$2,160,209
1923*	3,400,000	16,200,000	2,533,000
1924*	3,440,000	16,450,000	2,598,000

*1923 and 1924 items estimated.

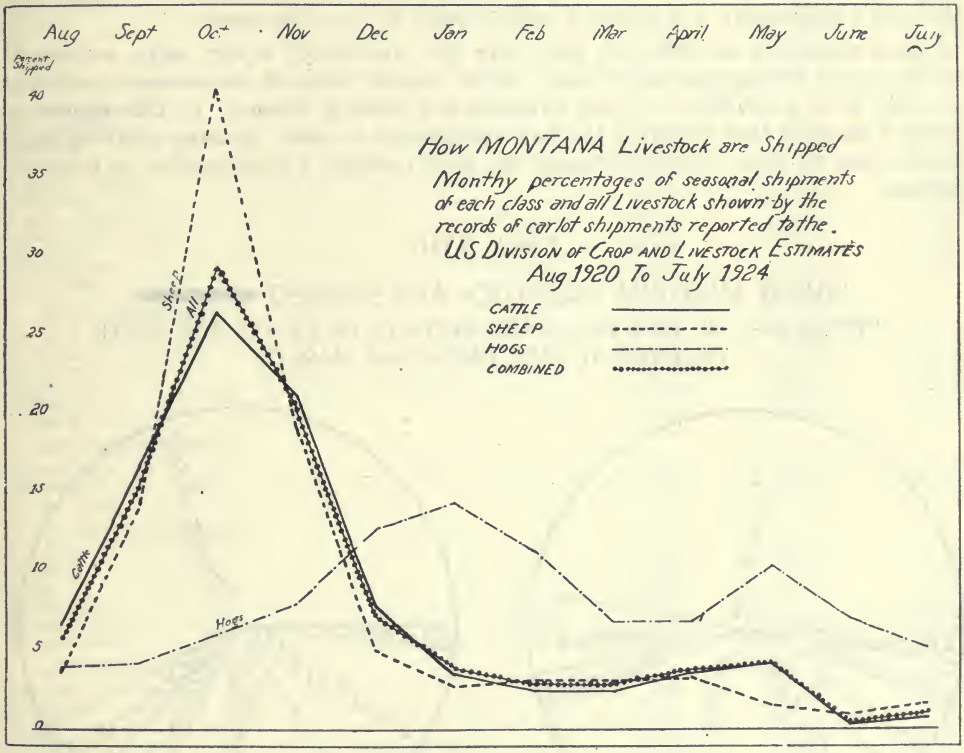
Poultry raising in the past year has faced lower prices than in 1923 for chickens and eggs which have held down gross returns from the industry. Improvement in marketing practices may be expected to better the prices to producers.

Turkey raising has expanded rapidly during recent years and reached a peak in 1923 when it was estimated that 241,500 turkeys were raised. Production in 1924 fell off somewhat from that figure according to the evidence available, due largely to unsatisfactory prices for the 1923 crop.

Bees and Honey.

With the increase in acreage of crops affording bee pasture, apiculture has made a steady progress in Montana in recent years. The 1920 census placed the number of bee colonies in the state at 12,000 and the 1924 number will total fifty per cent larger. Estimated income from honey and wax in 1924 was $176,000 compared with $170,000 in 1923. Montana usually ranks first among all other states in average production of surplus honey per colony, having an average yield of 82 pounds per colony over the ten-year period 1913-1921. The 1924 season was not as favorable as 1923 and average yield per colony dropped to 88 pounds compared with 118 pounds in the preceding year.

Figure XVI.



MONTANA WOOL PRODUCTION.

	1919	1920	1921	1922	1923	1924
Wool Produced (thousands of pounds)	18,267	16,000	16,400	16,770	17,775	19,316
Montana's Rank with other States	3	5	5	4	3	3

How Montana Livestock are Shipped.

The seasonal peak of shipments of cattle and sheep coincides with that of crops, coming in October. This is due to the fact that the bulk of marketings of cattle and sheep is made up of range stuff, which finishes as grass-fat stock with the curing of grass on the ranges in August and September, the flesh gain being essentially that of a crop from the ranges. Hogs do not follow the trend of cattle and sheep marketings, reaching a much lower peak in January following fall feeding and also show a secondary peak in the spring when the winter fed hogs are unloaded. The proportion of hogs going into carlot shipments is less than with cattle and sheep since as yet a relatively large part of Montana's pork production is needed at home and is slaughtered locally. Winter and early spring marketings of cattle and sheep have tended toward some increase in recent years, with the introduction of winter feeding of cattle and sheep principally in the Billings district, with the development of the sugar beet industry.

Where Montana Livestock are Shipped.

Chicago takes the bulk of Montana's shipments of cattle and sheep, St. Paul following as the second important market. The figure below shows distribution of 1923 shipments of cattle and sheep at important stockyards. Usual distribution of Montana's marketings will conform quite closely to the 1923 graph.

Hog shipments up until last year have not represented a very large percentage of the state's production, the industry in its present stage of development requiring the bulk of its production for local slaughter and packing demand. In 1924 shipments doubled those of 1923 following the large production in 1924. A large share of shipments went to coast markets although St. Paul received a good portion of the marketings.

Figure XVII.

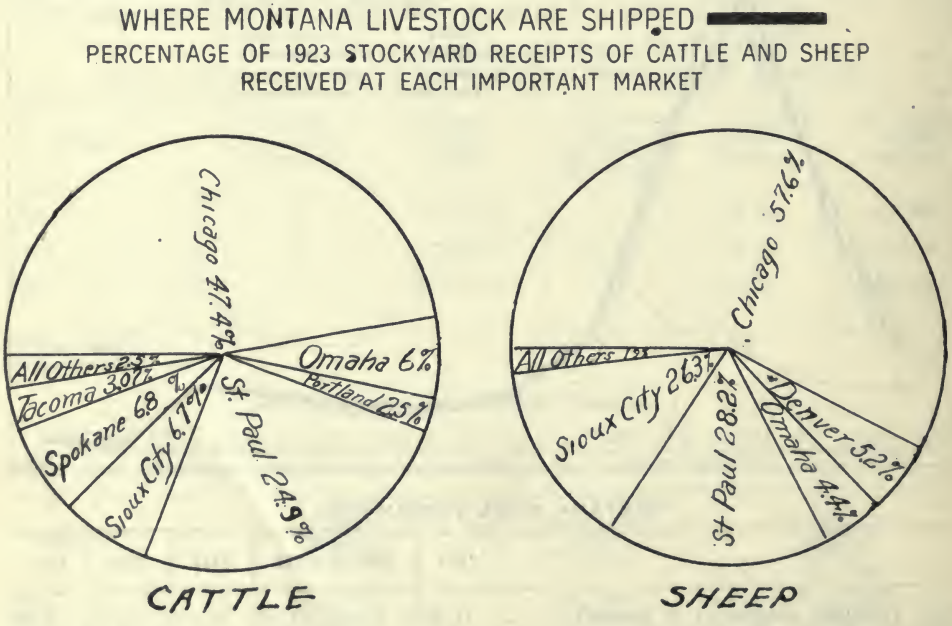


Table XVII.

NUMBERS OF HORSES, CATTLE AND SHEEP BY COUNTIES.
(As shown by assessors to State Board of Equalization, 1924.)

DISTRICT AND COUNTY:	All Horses	All Cattle.	All Sheep.
NORTHWESTERN:			
Flathead	3,833	9,164	3,310
Lincoln	1,687	2,537	116
Lake	4,375	10,222	2,312
Sanders	2,500	9,863	5,716
NORTH CENTRAL:			
Blaine	14,599	33,322	94,626
Chouteau	13,731	25,599	36,561
Glacier	4,685	15,592	29,230
Hill	10,944	12,743	13,551
Liberty	3,488	6,565	7,844
Pondera	9,309	14,802	26,620
Teton	9,410	19,151	36,972
Toole	5,721	7,502	26,703
NORTHEASTERN:			
Daniels	7,832	10,713	3,708
Phillips	18,165	23,781	49,038
Roosevelt	9,430	13,490	1,209
Sheridan	14,099	18,471	6,823
Valley	28,838	29,413	63,815
WEST CENTRAL:			
Deer Lodge	1,392	5,490	4,278
Granite	2,881	11,194	9,849
Mineral	568	848	359
Missoula	2,886	9,520	1,572
Powell	3,610	16,378	84,990
Ravalli	5,236	13,593	18,630
CENTRAL:			
Broadwater	3,540	11,361	24,026
Cascade	10,078	31,525	69,557
Fergus	24,579	49,186	50,710
Golden Valley	5,084	9,780	9,807
Jefferson	3,481	12,661	5,044
Judith Basin	7,691	33,577	41,769
Lewis and Clark	4,977	24,801	59,205
Meagher	4,300	20,492	100,977
Musselshell	6,092	12,138	8,431
Wheatland	4,737	20,129	53,416
EAST CENTRAL:			
Dawson	14,582	20,989	8,848
Garfield	16,468	23,989	56,905
McCone	18,336	21,112	12,887
Prairie	10,521	15,061	13,965
Richland	13,443	17,186	7,655
Wibaux	5,931	7,582	2,268
SOUTHWESTERN:			
Beaverhead	12,017	79,359	158,145
Madison	8,907	33,696	104,282
Silver Bow	2,016	5,654	4.092
SOUTH CENTRAL:			
Carbon	7,118	12,831	21,148
Gallatin	10,618	18,985	16,313
Park	5,991	20,141	53,611
Stillwater	7,839	17,988	25,812
Sweet Grass	5,482	22,299	58,332
Yellowstone	11,553	20,368	41,690
SOUTHEASTERN:			
Big Horn	7,928	60,709	28,970
Carter	11,103	27,299	82,375
Custer	11,068	41,092	49,354
Fallon	8,860	14,954	7,346
Powder River	10,204	45,780	17,230
Rosebud	8,667	20,331	63,286
Treasure	2,630	7,950	9,524
STATE	465,060	1,105,958	1,794,812
*Estimated Total Number on Jan. 1, 1924	611,000	1,452,000	2,370,000
Estimated Total Number on Jan. 1, 1925	593,000	1,505,000	2,536,000

*By U. S. Denison, Crop and Livestock Estimates.

Table XVIII.

ESTIMATED MILK COWS BY COUNTIES—JAN. 1, 1919, 1924 and 1925.

DISTRICT AND COUNTY:	1919 Census Jan. 1.	1924 Revised Jan. 1.	1925 Estimate Jan. 1.
NORTHWESTERN:			
Flathead	5,411	6,000	6,500
Lake	.....	2,200	2,700
Lincoln	864	1,300	1,600
Sanders	1,295	2,200	2,700
NORTH CENTRAL:			
Blaine	3,068	4,200	4,400
Chouteau	5,147	5,000	5,100
Glacier	462	400	700
Hill	4,413	4,800	5,000
Liberty	1,032	900	900
Pondera	2,029	3,800	4,000
Teton	2,872	3,400	3,600
Toole	1,159	1,500	2,000
NORTHEASTERN:			
Daniels	.....	2,700	2,800
Phillips	3,601	4,700	4,800
Roosevelt	2,897	4,300	4,600
Sheridan	9,078	9,800	9,900
Valley	3,488	2,900	3,300
WEST CENTRAL:			
Deer Lodge	917	1,400	1,600
Granite	1,471	2,600	2,800
Mineral	286	400	500
Missoula	4,645	6,000	6,300
Powell	2,396	4,300	4,600
Ravalli	6,886	8,000	8,500
CENTRAL:			
Broadwater	1,580	2,200	2,500
Cascade	6,061	7,000	7,200
Fergus	11,312	10,400	10,300
Golden Valley	.....	2,700	2,900
Jefferson	2,670	4,000	3,900
Judith Basin	.....	4,200	4,300
Lewis and Clark	3,078	3,800	5,000
Meagher	1,114	2,900	3,300
Musselshell	5,317	4,500	4,700
Wheatland	1,942	3,800	3,900
EAST CENTRAL:			
Dawson	1,708	3,500	3,800
Garfield	1,402	1,800	2,200
McCone	1,772	1,600	2,400
Prairie	1,527	2,100	2,700
Richland	3,698	5,300	5,500
Wibaux	2,412	3,000	3,600
SOUTHWESTERN:			
Beaverhead	1,573	2,000	2,200
Madison	3,033	4,700	4,800
Silver Bow	2,232	3,800	5,000
SOUTH CENTRAL:			
Carbon	4,047	4,800	4,800
Gallatin	6,855	7,600	7,700
Park	3,237	4,000	4,300
Stillwater	3,667	4,400	4,700
Sweet Grass	2,221	3,200	3,300
Yellowstone	7,371	8,400	8,500
SOUTHEASTERN:			
Big Horn	1,534	2,400	2,900
Carter	796	1,500	1,700
Custer	1,961	3,000	3,200
Fallon	2,355	3,300	3,600
Powder River	418	800	900
Rosebud	2,193	2,700	3,000
Treasure	922	1,800	2,300
STATE	153,425	204,000	220,000

Monthly Condition Reports on Ranges —Cattle and Sheep.

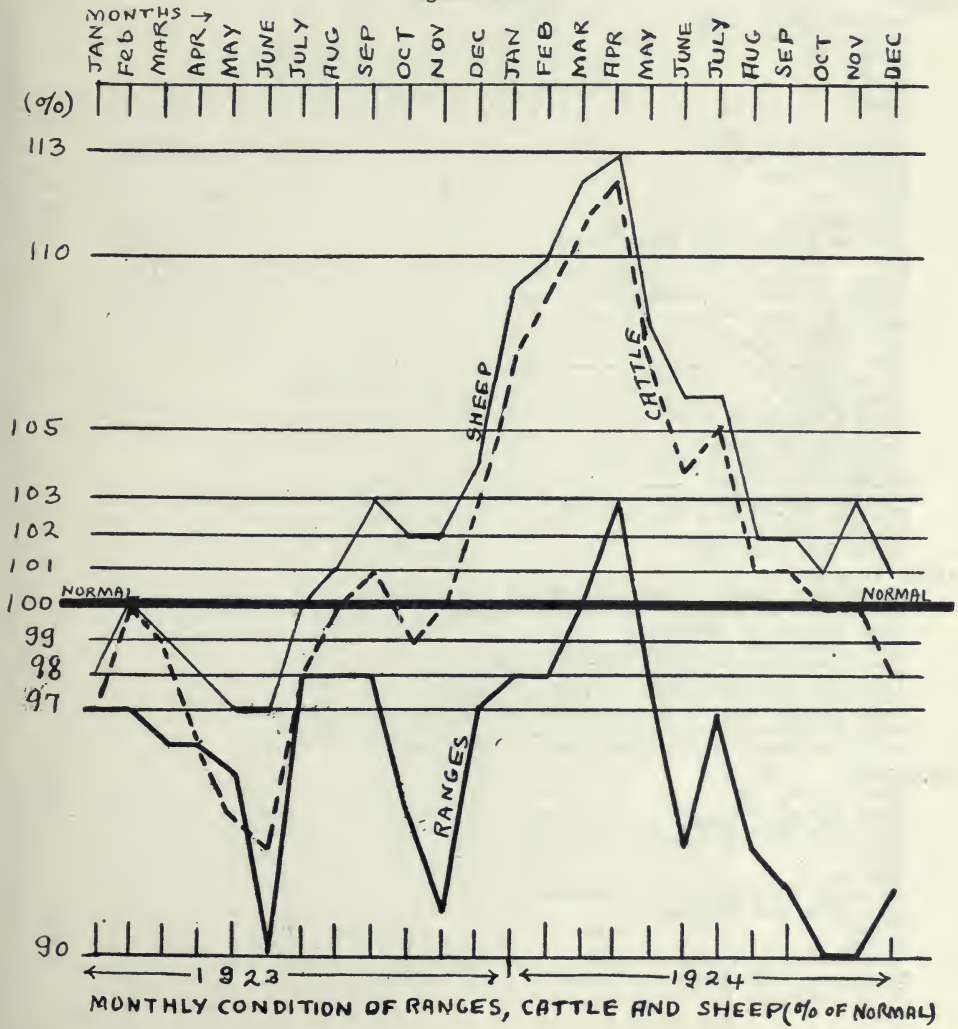
In co-operation with stockmen throughout the state, the Montana Crop reporting service, issues monthly reports on average conditions of ranges, cattle and sheep, together with information relating to marketing intentions, feed supplies, calf and lamb crops, etc.

The condition of ranges, cattle and sheep is estimated monthly on the basis of 100 per cent representing a high average condition of health and flesh as it relates to stock and as a high average actual and potential condition of range grass as it relates to ranges.

Weather conditions affecting growth and feeding quality of grass ultimately reflect themselves in condition of livestock and monthly estimates of these factors give a good picture of what is taking place during the range feeding and winter seasons.

The graph shows the trend of factors affecting condition of ranges, cattle and sheep during the months of 1923 and 1924. Both years were favorable ones on the whole, considering that an average condition of 90 per cent is rated as very good and that of 100 per cent and over as excellent.

Figure XVIII.



MONTANA CALF AND LAMB CROPS, AND LOSSES OF CATTLE AND SHEEP.

YEAR:	Calf Crop* Per Cent	Lamb Crop* Per Cent	Cattle Losses** Per Cent	Sheep Losses** Per Cent
1922	69	75	9	11
1923	70	73	6	6
1924	74	81	6	6

*Based upon number of cows and ewes of breeding age on hand at the beginning of the year.
**Based upon the total number of cattle and sheep on hand at the beginning of the year.

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